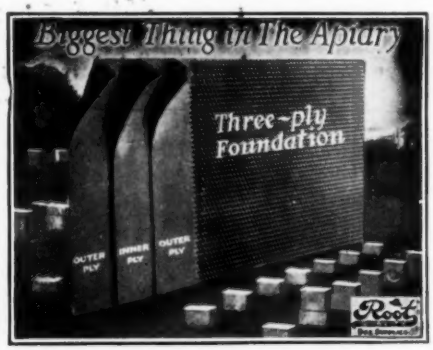
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# AMERICAN BEE JOURNAL




## WITHSTANDS HOT WEATHER

**Non-Sagging  Non-Stretching**

Stretched cells reduce the brood area of combs

Drones eat up your profits

Stop this loss. For efficient, profitable combs use THREE-PLY

Order now. No advance in prices

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## THE A. I. ROOT CO. OF IOWA

**COUNCIL BLUFFS, IOWA**

# LOTZ SECTIONS

•

*"The Best Money Can Buy!"*

•

We are now featuring only the Mill Run grade of section due to the scarcity of basswood lumber.

This grade still maintains the high quality of fine workmanship, and accurate dimensions long associated with our product.

WRITE FOR PRICES

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## August Lotz Company

**Manufacturers and Jobbers of Bee Supplies**

**BOYD, WISCONSIN**

# RED STICK APIARIES & CO.

MEMBER LOUISIANA RETAILERS ASSOCIATION

## *Package Bees and Queens*

Twenty-six Years as Commercial Queen Breeders. Oldest Combless Package Bee Shippers in Louisiana.

### Disease Resistant Stock

**ITALIAN BEES AND QUEENS**

| | |
|---|---|
| 2-lb with spring bred laying queens | $4.00 |
| 3-lbs. with spring bred laying queens | 5.00 |
| Extra queens—any number | 1.25 |

WHY PAY MORE FOR THE BEST

BOOK EARLY

PLANNING WITH ENTHUSIASM IS THE ESSENTIAL OF SUCCESSFUL BEEKEEPING

## Red Stick Apiaries & Co.

MAIN OFFICE, 113 LEE AVENUE

**DONALDSONVILLE, LOUISIANA**

Telegraph Western Union

# Three-Band Italian Package Bees

•

BOOKED TO OUR CAPACITY FOR APRIL. HAVE OPEN DATES IN MAY FOR THREE POUND PACKAGES ONLY, WITH OR WITHOUT QUEENS.

| | |
|---|---|
| In lots of 1-29, each with queen | $5.10 |
| Lots of 30 or more | 4.50 |

If queenless packages are wanted deduct $1.10 from the above prices.

For introduced queens add $1.10 to the price of each package.

•

## JACKSON APIARIES

**FUNSTON, GA.**

# QUALITY

**The manufacturing of *quality* bee supplies is a very exact science, requiring both skilled workmanship and the best of materials.**

**Babcock's new beehive factory, located in the heart of the white pine and cypress timber regions, is now in full production to give you QUALITY beehives that will equal any on the market at any price.**

Only Babcock offers you hives made with everlasting **Cypress bottom boards,** bodies of Cypress or high quality soft beehive pine, and telescoping covers complete with *pure aluminum metal covering.* These are truly everlasting hives with years of service built into every part. Completely dovetailed, this perfect fitting equipment is well worth the slight additional cost and will pay for itself many times. All hives are supplied with divided bottom bar standard frames unless otherwise specified.

Orders are now being accepted for only the following items, therefore we would appreciate your not asking us to quote prices on anything else.

Beehives, complete as above, and without inner covers. Shipped only in multiples of five, ten, etc.

| | |
|---|---|
| Furnished in 10-frame size only—FIVE COMPLETE HIVES . . . . . | $28.75 |
| COVERS ONLY, complete with aluminum covering, five for . . . . . | $7.75 |
| Bottom Boards, of 100% pure Cypress, 5 for . . . . . | $5.25 |

We cannot accept orders for extra frames or supers at this time. Watch this space for later information on these items.

Orders for complete hives, covers only, or bottom boards will be filled in order received.

## BABCOCK HONEY COMPANY

803 Sumter Street : Columbia, S. C.

Telegraph: Western Union Telephone: 41621



Above photo shows a portion of one of our queen yards containing over 10,000 nuclei.

# ITALIAN BEES AND YOUNG QUEENS

We still have open dates for package bees and queen orders during latter half of April and all through May.

**PRICES—WITH QUANTITY DISCOUNTS**

| | 1 to 9 | 10 to 49 | 50 to 99 | 100 & above |
|---|---|---|---|---|
| 2-lb. pkg. with queen (each) | $4.50 | $4.25 | $4.15 | $4.00 |
| 3-lb. pkg. with queen (each) | 5.65 | 5.40 | 5.30 | 5.15 |
| 4-lb. pkg. with queen (each) | 6.80 | 6.55 | 6.45 | 6.30 |

Queens (each) $1.35. Tested $2.00

**WE SOLICIT LARGE ORDERS**

## OVERBEY APIARIES : Bunkie, La.

# Highest Prime Quality 3-Banded Italian Improved Strain Package Bees & Queens

Backed by over 25 years careful selecting, breeding and shipping to all points in U. S. A. and Canada with 100% perfect satisfaction guaranteed to every one, in every respect.

You get each season's improvements when buying from us, what we mean, each season we select the best for honey producing qualities, disease resistance qualities from many hundreds of best by test colonies. Our breeding and mating stock is carefully picked and tested out for the coming season for your benefit, sparing neither labor nor money in producing the best with patience and long experience which we feel are surpassed by none. Mating is very important in breeding the best strain of bees, we carefully select our drone colonies for mating in quality same as breeders.

Book your orders now to reserve your specified shipping date. No customer will be disappointed when booking their orders with us. Your bees are guaranteed on time, our prices for 1947 are as follows—one-fourth down payment with order, balance due 10-days before your specified shipping date.

| | Queens | 2-Lb. | 3-Lb. | 4-Lb. | 5-Lb. |
|---|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.85 | $7.20 | $8.55 |
| 25-99 | 1.30 | 4.25 | 5.55 | 6.85 | 8.15 |
| 100-up | 1.20 | 4.00 | 5.25 | 6.50 | 7.75 |

We guarantee full weight packages, young vigorous bees with their working life ahead, no supersedure in our queens, health certificate with each shipment, 100% perfect satisfaction guaranteed in every respect. For "HIGHEST PRIME QUALITY," PROMPT SHIPMENT we feel free to say we are surpassed by none. Book your orders now for your requirements if possible. We are working each day now to fulfill your requirements for 1947. Placing orders in advance enables us to know what shipments must go out each day in shipping season. THANK YOU.

## H. A. Farmer Apiaries : Cottonwood, Ala.

**TELEGRAPH AND EXPRESS OFFICE DOTHAN, ALA.**

# QUEENS

We are booked up on packages and Caucasian Queens until after May 20th, but we can still take a few orders for Italian Queens for April and May. After May 20th we will be able to handle both package and queen orders with either Caucasian or Italian.

MAY WE HAVE YOUR BUSINESS?
WE WILL PLEASE YOU AS WE HAVE MANY OTHERS IN THE PAST

● 1947 PRICES THROUGH MAY 20TH ●

| | Queens | 2-lb. | 3-lb. | 4-lb. | 5-lb. |
|---|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.85 | $7.20 | $8.55 |
| 25-99 | 1.30 | 4.25 | 5.55 | 6.85 | 8.15 |
| 100-up | 1.20 | 4.00 | 5.25 | 6.50 | 7.75 |

Queens clipped or by Air Mail at no extra cost.

● 1947 PRICES AFTER MAY 20TH ●

| | | | | | |
|---|---|---|---|---|---|
| 1-24 | $1.10 | $4.20 | $5.55 | $6.90 | $8.25 |
| 25-99 | 1.00 | 3.95 | 5.25 | 6.55 | 7.85 |
| 100-up | .90 | 3.70 | 4.95 | 6.20 | 7.45 |

For queenless package deduct price of queen.

## The Stover Apiaries : Mayhew, Miss.

# LEATHER ITALIAN BEES & QUEENS

We have been shipping breeder queens to Europe, Egypt, Australia, South America and Cuba, this fact means much to you in that you may purchase these bees for your own requeening at reasonable prices.

We are proud to be in position to maintain the reputation our bees have made for themselves and for us.

We guarantee that our queens are positively gentler than any other Italian bee available and that their gathering ability is superior to any other race or strain. They will not swarm unless badly neglected. These bees will make a living where others starve.

We have been fortunate in having Mr. R. H. Kerr join our force. Mr. Kerr is one of the foremost queen breeders in this country. With exceptional personnel in our organization, you may be sure that we are prepared to serve you well.

| | Prices from April 1st to June 1st. | | | | | Prices after June 1st. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queens | 2-lbs. | 3-lbs. | 4.lbs. | | Queens | 2-lbs. | 3-lbs. | 4.lbs. |
| 1-24 | $1.40 | $4.50 | $5.85 | $7.20 | 1-24 | $1.10 | $4.20 | $5.55 | $6.90 |
| 25-99 | 1.30 | 4.25 | 5.55 | 6.85 | 25-99 | 1.00 | 3.95 | 5.25 | 6.55 |
| 100-up | 1.20 | 4.00 | 5.25 | 6.50 | 100-up | .90 | 3.70 | 4.95 | 6.20 |

For queenless packages deduct price of queen. Packages F.O.B. Jeanerette. Queens prepaid. Clipped or by Air Mail at no extra cost.

## THE RICH HONEY FARMS
### JEANERETTE, LOUISIANA



# Editorial Comment

## THE FEDERATION

FOR the first time the beekeepers have a smooth running national organization with substantial support. There are so many problems to be met in these hectic days that an industry without such organization is at the mercy of economic forces which may prove disastrous. It may well prove that the actions of the Federation in the next few months may make the difference between a reasonable degree of prosperity and a severe state of adversity.

During the depression of the thirties the dairy industry was able to survive with smaller losses than other groups because it had an efficient organization. For lack of it the beemen suffered more severely than others. A period of reaction is unpleasant for everybody but well organized groups are able to provide a cushion which prevents the extreme effects which others feel.

There is every indication that the beekeeping industry is prepared to provide the funds necessary to insure the continuation of the American Honey Institute which has already demonstrated its value over a period of years, and the Federation, which although new, has already shown its worth.

The Federation is composed of 53 state and local societies and nearly 1,000 individual members. It is to be hoped that this number can be greatly increased in order to provide the funds which are needed to operate with maximum efficiency. Little can be done without money and, when emergencies arise, there is little time to spend in the raising of funds to meet expenses.

Every individual who is in any way dependent upon the honeybee should join in supporting the organizations devoted to the improvement of public relations for the honey-producing industry.

## THE NEW CLOVER

INTEREST in the new clover, *Trifolium ambiguum,* now quite generally called Pellett clover, continues to grow. It will be planted in hundreds of new localities this season and within a few months more information should be available as to its possible value. If it proves generally useful it will be an important addition to our agriculture. Otherwise it will probably soon be forgotten. A nurseryman who is much interested in the plant says that it will prove to be either the greatest thing in his state or of no value at all. If it lives up to its promise he expects great things from it. Otherwise he regards it of no use at all. Only time will tell.

## FLORIDA

THE meeting of the National Federation at Tampa in January was the occasion for the first visit of many beemen to Florida. The balmy summer weather was a great surprise to many who were unprepared to find so great a change from the snow that they had left behind. Visitors from the North go south in increasing numbers each year and many find the climate so attractive that they begin looking for a winter occupation to justify an annual visit.

Hundreds of beekeepers have established apiaries in Florida for the purpose of making increase for taking north in the spring. Others are seeking locations with the object of moving to Florida for permanent residence. It would be difficult to estimate the number of tourists who visit Florida for the winter months and then return to the north with the migrating birds when spring arrives. Trailer camps, tourists camps and roadside stands occupy the attention of hundreds of transients.

Florida's greatest asset is the climate and the public generally is coming to appreciate that fact. Millions have been spent in an effort to capitalize the visits of the tourists and in many cases they are exploited far more than would be to the permanent advantage of the state. The visitor soon learns to look out for himself and to avoid the places where he is overcharged.

Florida soil is very deficient in plant food and a large outlay for commercial fertilizer is necessary in order to produce a crop. Except for the fact that her vegetables are ready in winter when prices rule highest, it would be impossible for the grower to compete in northern markets.

# For March, 1947



Florida is lacking in such resources as make for prosperity in the north, but nature has compensated her with balmy air, winter sunshine and a June-in-January climate. It has become the common practice to spend the summer making money in the north and the winter spending it in Florida.

## 1947 HONEY MARKETS

A live subject at the Florida meetings was the subject of markets for 1947. No one can fathom, of course, what the market is to be. It was quite generally agreed that although the beekeeper's desire of a higher market than under the O.P.A. ceilings, still no one was quite prepared to have the prices "shoot up" to where they did, and, I think, considered it unfortunate.

Just what will the market be when the 1947 crop is ready for disposal? That is anyone's guess. However, it is most unlikely that the market will be as high as we have seen during the winter months. Already there apparently seems to be a resistance on the part of the consumer against the high price of honey on the grocers' shelves. While this is not a general condition, it does occur in many sections, we are told.

We must also not lose sight of the fact as R. D. Bradshaw points out in his very fine talk before the meeting that as production increases, the volume of "durable goods" like ice boxes, automobiles, etc. is going to attract the people and they are going to want to buy these items, perhaps using more closely what they are paying for foodstuffs or soft foods. In other words, honey will have to compete as will other food products with manufactured articles for a proportion of the consumer's dollar.

Naturally the other big item which will reflect on honey prices is what will other sweets and sugar do. If the O.P.A. is allowed to extend beyond the present date set as March 30, undoubtedly the chances for quite high honey prices are much better than if all O.P.A. is removed, although after all it depends largely on how much sugar there is available. With ceiling prices of sugar removed, if the sugar is not available, undoubtedly there will be a jump in sugar prices. In any case, we can rather look for an abatement of the higher honey prices to something more in line with consumption value.

The consensus of opinion seems to be that we need not worry about prices during 1947 dropping back to or below the former O.P.A. ceilings. Just what they will actually do of course, is any one's guess.

## LOOSESTRIFE HONEY

IT is very difficult to determine the quality of honey from most minor sources due to the fact that it is so seldom stored unmixed. Even when there is a vast acreage of some major crop as clover or buckwheat there is much variation in both color and flavor of the honey.

In an effort to settle disagreement as to the quality of honey from purple loosestrife we appealed to Prof. E. J. Rice, of Cornell University. In turn he asked the opinion of several New York beekeepers who are located in the loosestrife areas.

The replies which Prof. Dice passed on to us indicate a decided disagreement. One says "This honey is of rather dark color and has a strong flavor." Another writes: "The honey was very nice, almost as light as the early honey." A third suggests that the quality will vary depending upon the soil where it grows. Still another reports that so many other plants are blooming along with loosestrife that it is very difficult to be sure whether you have loosestrife honey or a mixture with sumac, goldenrod, virgin's bower, and linden.

Several mention the resemblance of loosestrife honey to motor oil in appearance. There is one mention of honeydew as responsible for reduced quality of fall honey generally.

Here is a good example of the need for careful study of our nectar sources and a better understanding of the influence of soil and other factors. Loosestrife is spreading and there is every indication that the day will come when it is an important source of honey in many localities. Many other little-known plants will assume greater importance and we need to know more about them.

# GARON'S Package Bees & Queens

## THREE-BANDED ITALIANS

### and Mraz's Strain Bred For Resistance to A. F. B.

We have some open dates for packages and queens from May 15th and later. Write us promptly for our earliest remaining dates. Discontinuance of our 1945-46 prices forced by higher commodity and labor costs. The following prices now effective:

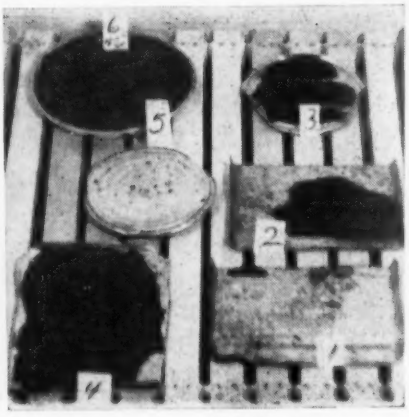
SPRING 1947

| Quantity | 1 to 9 | 10 to 24 | 25 to 99 | 100 or more |
|---|---|---|---|---|
| 2-lbs. with queen | $4.25 | $4.15 | $4.10 | $4.00 |
| 3-lbs. with queen | 5.30 | 5.20 | 5.15 | 5.00 |
| 4-lbs. with queen | 6.50 | 6.40 | 6.35 | 6.30 |
| Young laying queens | 1.25 | 1.25 | 1.20 | 1.15 |

10% down payment balance 15 days before shipping date.
(Queens clipped at no extra charge)

DEPENDABILITY, QUALITY AND SERVICE

GARON BEE COMPANY PHONE 8614 Donaldsonville, La.



The picture shows an inexpensive way to feed Master Mix Pollen.
No. 1 showns all pollen taken.
No. 5 shows lid inverted in right position.
No. 6 bucket lid filled ready to turn over for the bees.

# MASTER MIX POLLEN

### STANDS OUT IN THE LEAD

We tried other mixtures such as soybean flour and syrup but the bees have taken MASTER MIX first. Made from cottonseed meal, soybean flour, skim milk, brewers' yeast, natural pollen, invert sugar and Sulfathiazole.

We have 165 colonies with electric heaters and by feeding Master Mix and syrup we had brood in from 2 to 4 frames December 15th while unheated colonies were dormant. Package bees also need pollen and syrup to build up fast. Our electric mill is busy mixing Master Mix Pollen.

ORDER AT ONCE— 1 NO. 10 LB. PAIL $2.50. 6 FOR $13.50
FREE CIRCULAR.

We breed three kinds of queens in separate yards. ITALIANS, CAUCASIANS mated to Italian drones, and Daughters of Queens bred for Resistance.

| | |
|---|---|
| 2-lb. package bees with queen | $ 5.00 |
| 3-lb. package bees with queen | 6.25 |
| 4-lb. package bees with queen | 7.50 |

Extra queens $1.50 each.

Over 30 years a shipper all over U. S. A. and Canada. Sulfathiazole used in feed at no extra cost to you. 10% books your order.

**BLUE BONNET APIARIES : R. 2, Box 23 : WESLACO, TEXAS**

# PACKAGE BEES with Queens

**ITALIANS**

| | |
|---|---|
| 3-lb. Pkgs with Queens | $5.65 |
| 2-lb. Pkgs. with Queens | 4.50 |
| Extra Queens | 1.35 |

**BY EXPRESS**

WE SERVE TO SERVE AGAIN

# SUNNY SOUTH APIARIES

MARKSVILLE, LA. I. CLARK, Prop.

**"SILVERHIDE"**

The ready mixed aluminum paint that you have been waiting for to paint your bee hives with. Reduces the temperature from ten to fifteen degrees, highly resistant to acid, fumes and brine conditions. No waste, every drop can be used, it does not skin over or harden in the container, apply with hand brush or air spray. Write for information and prices at once.

**TUNG OIL PAINT MFG. CO., Inc.**
P. O. Box 83 Orangeburgh, N. Y.

## Promptness is Our Aim

For a bigger crop get our three Banded Italians. 96% baby bees, 4% teachers.

We have added 500 colonies to our outfit and two more men, which will enable us to better serve you through 1947.

2-lb. package and queen ..... $4.00
3-lb. package and queen ..... 5.00
No extra queen.
Combless bees, 1 lb. ..... $1.30
Get the best while it lasts.
27 years in bees.
ANDRE DUPUIS, Prop.

**DUPUIS APIARIES**
BREAUX BRIDGE, LOUISIANA

**Now booking orders for the month of May**

| | 1 to 11 | 12 to 99 | 100 or more |
|---|---|---|---|
| 2-lb. with queen | $4.00 | $3.85 | $3.75 |
| 3-lb. with queen | 5.00 | 4.85 | 4.75 |

Queens $1.25 each.

**J. P. CORONA**
BOX 124 KENNER, LA.

## Elk Mountain Pollen Supplement

is the early spring answer to a field bee's prayer. Scientifically blended, ready to feed. The bees love it. Send $1.00 for a postpaid trial bag with feeding instructions and price lists.

**ELK MOUNTAIN PRODUCTS**
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## THE BEEKEEPERS' MAGAZINE

1 YEAR, $1.50; 3 YEARS, $3.00

If you haven't seen this popular journal, send for free sample copy.

**The BEEKEEPERS' MAGAZINE**
3110 Piper Road Lansing 15, Mich.

**FOR SALE — QUEENS**

Make this a profitable year, use ZEIGLER'S 3-BANDED ITALIAN QUEENS, pure mating and satisfaction guaranteed. Write for prices, opening dates begin April 1st.

**S. C. ZEIGLER**
FORT DEPOSIT, ALABAMA

## PACKAGES and QUEENS

EITHER ITALIAN QUEENS
OR CAUCASIAN QUEENS BRED TO
ITALIAN DRONES

| | Queens | 3-lb. with queen | 2-lb. with queen |
|---|---|---|---|
| 1-24 | $1.30 | $5.75 | $4.40 |
| 25-99 | 1.20 | 5.45 | 4.15 |
| 100 up | 1.10 | 5.15 | 4.00 |

Queenless packages deduct price of queen. We want to be of service to you.

**LOUIS L. COUCH**
The Village Beekeeper
PINEVILLE, LOUISIANA




## BEES AND QUEENS

Here we are folks, back on the job, ready to take your orders, large or small, for our light Three Banded Italian Bees and Queens. Live delivery, health certificate, and prompt service guaranteed. Young select untested laying queen in a package.

| | 2-Lb. | 3-Lb. |
|---|---|---|
| 1 to 24 at | $4.50 | $5.85 |
| 25 to 49 at | 4.25 | 5.50 |
| 50 or more at | 4.00 | 5.20 |

10% reserves shipping date.

**PLAUCHE BEE FARM : HAMBURG, LA.**

## QUEENS PACKAGE BEES QUEENS

LINE BRED ITALIAN STRAIN FOR HIGHEST HONEY PRODUCTION.

| | 1 to 9 | 10 to 49 | 50 to 99 | 100 up |
|---|---|---|---|---|
| 2-lb. package with queen | $4.50 | $4.25 | $4.15 | $4.00 |
| 3-lb. package with queen | 5.65 | 5.40 | 5.30 | 5.15 |

| | 1 to 49 | 49 to 100 | 100 up |
|---|---|---|---|
| Queens, any number | $1.35 | $1.25 | $1.20 |

Queens, any number shipped daily prepaid by Air Mail. Your satisfaction is our success.

**SOUTHLAND APIARIES : MONTGOMERY & SON : Ball, La.**




# American Bee Journal

HAMILTON, ILLINOIS

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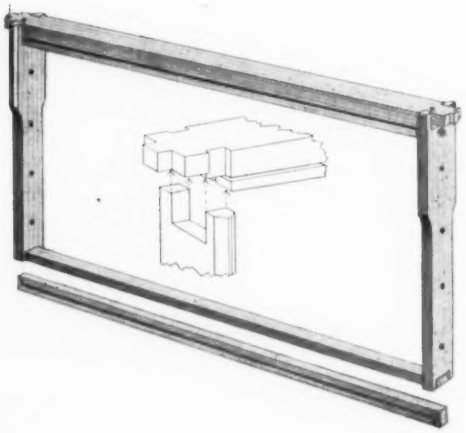
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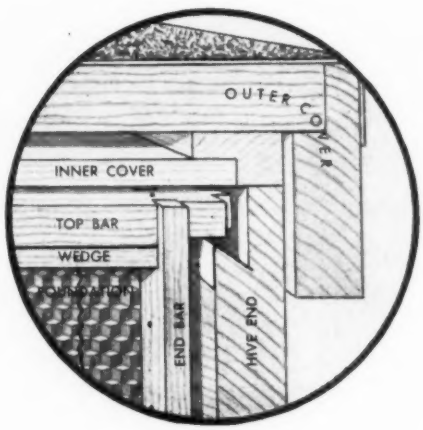
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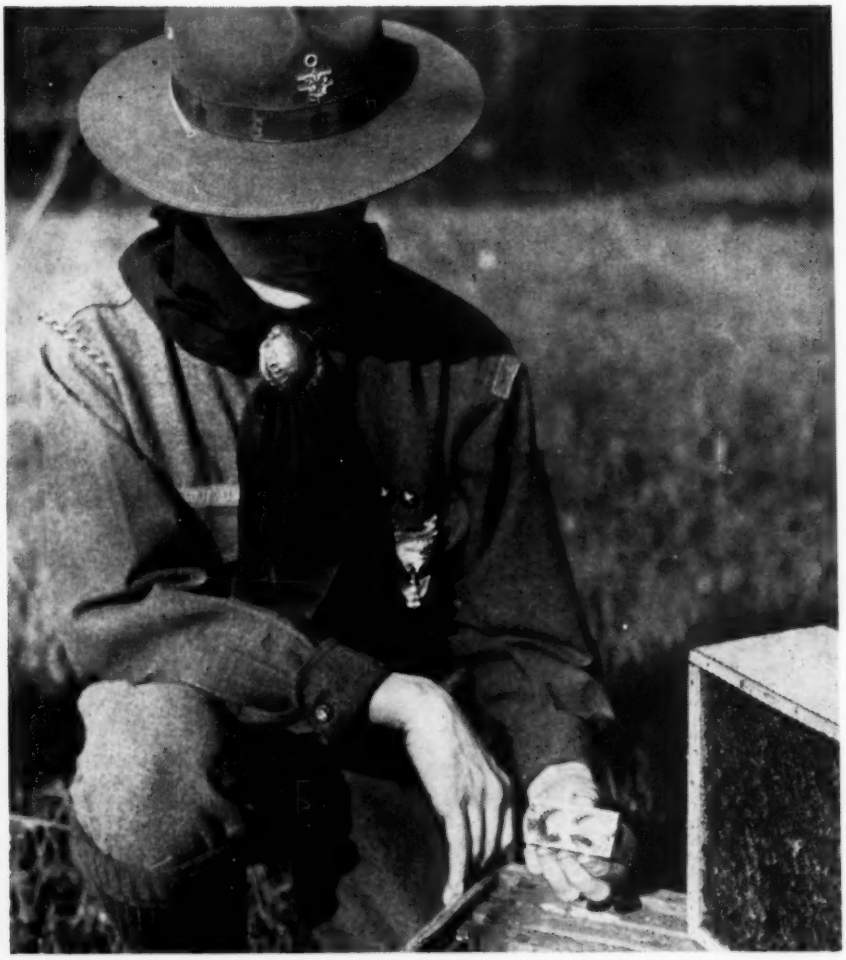
# FEATURES



PHOTO from John Allen and Son, West Lafayette, Indiana. Pussy willow means bees are on the hum, and time for yard work is here. Ever think how much work you can do with bees when conditions are just right—Natural Factors that Influence Beekeeping may stir your ideas. Orchard pollination brings its own problems, according to Robert Mead. Maybe you're curious too—about us. We do something about it on page 116. Latham (118) tries sulfa a different way. Feed those substitutes outdoors, says S. D. Winters (122).

# Boy Scout Beekeepers

By Gilbert Geis





"BEEKEEPERS are a social, happy sort of people," Dr. E. F. Phillips, of the department of apiculture, Cornell University, Ithaca, New York, writes in his introduction to the Boy Scouts of America merit badge booklet on beekeeping. "It is hard to imagine a beekeeper who would not be glad to help a Scout to find out more about bees," he adds.

"In preparing for a merit badge in beekeeping it is a good idea to hunt up a beekeeper and spend a few hours watching the bees," Dr. Phillips continues. "Perhaps you can help handle them. It is not dangerous and you will soon find yourself doing things that you would perhaps have considered foolhardy. You will get plenty of action in such a visit. No Scout ought to have a merit badge in beekeeping until he has handled bees."

The Scouts seem to agree with Dr. Phillips' ideas on the interest and the excitement in beekeeping. More than 13,000 of them have been awarded the badge since 1911. The most recent high was registered in 1945 when 645 Scouts completed the requirements necessary to earn the award. The war undoubtedly accounted for the slight drop during the past few years.

Beekeeping, according to Dr. Lorne Barclay, director of the Scout's educational office, is one of the comparatively few badges which is open to both second- and first-class Scouts. "This gives the younger boys an earlier chance to develop their interest in the subject," Dr. Barclay explains.

In Louisville, Kentucky, for instance Scouts interested in beekeeping receive their initial information from the merit badge pamphlet and from books in the public library. After their interest is once aroused, they are encouraged to visit someone who keeps bees as a hobby or as a business and to observe them under actual conditions. Thus, the local beekeepers cooperate with the Scout organization. In rural areas, Scouts usually receive instructions from the 4-H Club leaders, or from members of the Future Farmers clubs. From time to time Scouts enter exhibits in county fairs. Beekeeping exhibits are also displayed in connection with the council's merit badge shows.

The Boy Scout requirements for a beekeeping merit badge are:

1. Examine a colony of bees, re-

(Top) As a Boy Scout merit badge project, beekeeping is a natural.

(Bottom) Wild colonies give the zip of sport to the new Scout beekeeper.

move the combs, find the queen, and determine the amount of the brood, number of queen cells, and the amount of honey in the hive.

2. Distinguish between the drones, workers, eggs, larvae, pupae, honey, wax, pollen, and propolis; tell how the bees make the honey, and where the wax comes from; and explain the part played in the life of the colony by the queen, the drones, and the workers.

3. Have had experience in hiving or artificially dividing at least one swarm. Explain the construction of the modern hive, especially in regard to the "bee spaces."

4. Put foundation in sections and fill supers with sections; and also remove filled supers from the hive and prepare the honey for market.

5. Write an acceptable article of not more than two hundred words on the difference in honey according to the flowers from which the nectar is obtained.

Or, the Scout may comply with the 4-H Club or Home Project requirements in Beekeeping which are:

1. Own a hive of bees.

2. Do all the work in care and management of the hive of bees.

3. Keep accurate cost account record of beekeeping during the season or year.

4. Exhibit honey samples as required by leaders in charge of 4-H Club work.

"For additional information the Scout should consult standard reference books," Dr. Phillips advises. He adds, however, "If you can find a successful beekeeper, though, he will be of more help than any book. The beekeeping industry needs the kind of men that a good Scout will become, so keep this in mind as you earn your merit badge. A visit to any apiary will make an interesting hike for the troop, too," he concludes.

---

New York.

# Natural Factors That Influence Beekeeping

By G. H. Cale

THE management of bees is greatly influenced by weather. All through the beekeeper's prcatice he will suit the job to the weather and he will learn as he goes just what he can do and what he cannot do in direct relationship to it. Much work can be done when the weather is cold that cannot be done when it is warm. In cold weather bees may be moved readily without any particular provision for moving, such as using screens or closing entrances. Also work that cannot be done when bees are apt to rob can be done when it is cold or when it is rainy, or when the wind is blowing. Bees can be requeened in cold weather and will accept queens more readily than at other times, although in winter it is not advisable to open the hive to requeen. Bees may be united more readily in cool, fall weather when they have no brood, than at any other time.

Moisture, latitude, altitude and soil are factors which affect the beekeeper materially. Moisture has much to do with honey crops. Moisture in the early spring causes plants to grow and mature and the value of rain prior to the honey season is evident by crop records. In the Middle West, for example, when the month of May has an abundant rainfall, it is usually the precursor of an above-average honey year. Apparently the clovers become established by the humid May weather. Also, rainfall in winter has much to do with honey crops. Winter periods of heavy snowfall often precede a year of heavy honeyflow.

On the other hand, excessive moisture during the early flow results in less nectar secretion and a smaller crop. Bees are not able to obtain nectar abundantly immediately after a rain, and sometimes a cold rain will cause nectar-producing flowers to reduce the secretion of nectar for a period so that bees do not re-establish themselves in the flow for several days. Also intermittent periods of rain in the early part of a honeyflow, which alternately prevents bees from flying and gathering and then releases them for field work when the weather clears, has an influence on swarming, particularly when colonies of bees are at the peak of population. That is probably one reason why there are more swarms some years than others.

As far as nectar secretion is concerned, the weather conditions most favorable to a honeyflow are a favorable to a honeyflow are a a succession of warm days followed by cool nights. Botanists tell use that the leaves are the finishing centers of the raw products which go to form the food of plants and that cool weather tends to bring about a greater manufacturing of food. When more food is made than required for the plant, it is given off through the flowers in the form of nectar. A nectary, to produce, must have its cell distended with water with the sugar in solution which forms the nectar itself. In extremely dry weather the small herbaceous plants usually cease nectar secretion while the trees that are less affected do not decrease their nectar secretion in the same degree. High temperature favors the production of starch and low temperature favors the formation of sugar.

General nectarflows increase in rapidity or intensity as one goes northward, and with the rapidity of the nectarflows comes a shortening of the period in which nectar is available. In the North the beginning and end of honeyflows are sharply marked, while farther south there is a gradual increase and a gradual decrease. Also northern honeys are lighter in color than honeys from the same source farther south. Generally speaking the farther north one goes in good beekeeping territories, the more certain the crops are. Farther south the beekeeper finds his greatest problem is in preventing the bees from converting everything they gather into brood. A northern man, on the other hand, finds his greatest problem in getting

(Please turn to page 135)



A famous five—(Left to right) Top row, Hale of Southern Beekeeper; M. G. Dadant of ABJ. Bottom, L. C. Dadant, Frank C. Pellett. With the "pill" case, Deyell of Gleanings.



Dunavan of South Carolina. What cha got?



Ned Prevost, of South Carolina, toastmaster at the banquet. What you hiding, Ned?



A. G. Woodman (spare that tree); LC (crimp-wire); and son-in-law of Harnack, McGregor, Iowa.



Dr. John (Eckert of California); Nathan Jensen, Jensen's Apiaries.

# Notes on the Tampa Meeting

By M. G. Dadant

Among the six hundred or more registered at the meeting, 42 states were represented. Florida, of course, was high point in attendance, with Michigan and New York tied for second, each having had 42. Ontario was well represented with 13, and there was one person from Norway.

Quite a number of the New York people are winter residents of Florida and have apiaries in the orange groves there. Most of them, however, are getting over the North-to-South move, and leaving their apiaries in their southern location.

Apparently much Florida beekeeping is a moving proposition and can mean pennyroyal to orange to mangrove, and back to palmetto, as well as a possible move to the tupelo. This is a lot of moving, we would say, necessitating a crop to carry expenses when honey is at ordinary figures.

The Norwegian spoken of above was Alfred Bergstra, a fine young man, who has been sent over here by his national association to study queen rearing. He was working with a Florida breeder. He expects to go back early this spring. Norway, now having many less bees than many of our states, has over 5,000 members in their national association.

Friday morning of the meeting week, a group of beekeepers went down to the gulf and took in some deep sea gulf fishing. George Vest, genial manager of the Lynchburg branch, came off first with a big sea bass. It looked to us like it weighed about thirty pounds. Some of the boys had a little difficulty with sea sickness. Another trip was planned for the Saturday immediately following the meeting. We have not heard from it.

Some two hundred and fifty attended the banquet. Ned Prevost was toastmaster; Frank Pellett gave a talk on early pure food laws; George Rea gave some of his experiences with folks who were superstitious about bees. The main talk was by Dr. E. F. Phillips who divulged some little known or completely unknown information on Moses Quinby, some of his early travels as gleaned from his own diary.

V. W. Grimsley, of the Railway Express Agency, talked before the meeting on the possibility of moving bees by air. At the present time, packages would cost about $2.00 to move the average distance from the

(Please turn to page 131)

# The Use of Package Bees For Orchard Pollination

By R. E. Newell

PACKAGE bee colonies are used extensively for orchard pollination where overwintered colonies are not sufficiently numerous or are unobtainable for rental. The writer has had considerable experience with package bees and has made a study of the relative amounts of pollen and nectar gathered by package bees in relation to that obtained by normal colonies.

Package bee colonies of 3 to 5 pounds of bees with queens, hived into regular standard hives fitted with full sheets of brood foundation and fed a sugar solution to give them a start a week or two previous to the orchard bloom give good results, and will often store substantial amounts of pollen and nectar which shows that they have fulfilled their purpose. However, such packages should be installed in the orchard. Moving package colonies before the foundation has been fully drawn out is not always successful. If combs of fully drawn out foundation, and one or two with honey are available to hive the packages, they may be moved with safety. I have seen such colonies fill a standard body of combs with brood, pollen, and nectar in 6 to 8 days during favorable flying weather.

Package colonies distributed through the orchards in the regulation shipping cages are not worth the cost. If the queens are liberated among the bees some of them may remain within the cages and build comb and store a fair amount of pollen and nectar, but due to the fact that the entire comb must be built they are not able to build sufficient comb in the short period of bloom to be effective. It is rare to find a package colony that will build the equivalent of two full brood combs during this short period. Nearly 50% of packages with liberated queens will swarm out. One of my customers used 18 3-lb. packages in 1943 and liberated the queens. Eight packages swarmed without working at all in the cages, and were hived in some empty supers. The balance of 10 packages worked halfheartedly, and did some pollinating, but the combined honey and pollen gathered by the 10 packages did not equal two normal rental colonies. Those that were hived in the supers of drawn comb and supplied with tops and bottoms made a respectable showing, but did not equal the regular standard rentals of eight frames of brood and bees in regular hives with supers of drawn comb.

In 1945 the orchardist purchased five 3-lb. package colonies and liberated the bees by opening one end of the shipping cage, but did not release the queens, but left them confined in the queen mailing cages. The bees collected enough pollen and nectar to build up two or three small combs with a combined area in each package which would equal about one standard brood frame. Flight activity of these packages was greater than many of the normal rental colonies, but much of this flight was entirely the play flight of young bees, and is misleading. A casual observer would believe the packages were out performing the rental duties of overwintered colonies.

A beekeeper who has worked with bees can readily understand why bees will swarm out of the regulation shipping cages, when the queens are released, and there are no combs to induce the bees to start working. When the queens are kept caged in the mailing cages, the bees do not have morale to do effective work. A queen liberated among the bees on fully drawn comb or even frames of foundation, starts laying within a day or two and the bees must really work to supply cells for egg laying, pollen, and nectar to feed the young larvae. This inducement to work is entirely lacking where the queens are caged.

The writer believes it is possible to secure good results with package bees for orchard rental where they are properly hived on drawn comb or full sheets of foundation in the orchard about a week ahead of the blooming period. Such units should consist of not less than 4 or 5 pounds of bees with queen, and should be liberally fed with sugar sirup to assist them in becoming established. The cost of such units exceeds the rental of established overwintered rental colonies. It is not profitable for an orchardist to do this work, unless he has had some experience as a beekeeper. It would be better for the average fruit grower to contact a local beekeeper qualified to establish such colonies, and maintain them through the period of bloom. A beekeeper who desires to increase his holding, might be induced to furnish the hives, combs, and labor. The orchardist should furnish the bees and pay the express charges. Such an arrangement would be profitable to both beekeeper and orchardist. The following season the beekeeper could rent the bees so obtained to the orchardist at the regular rental.

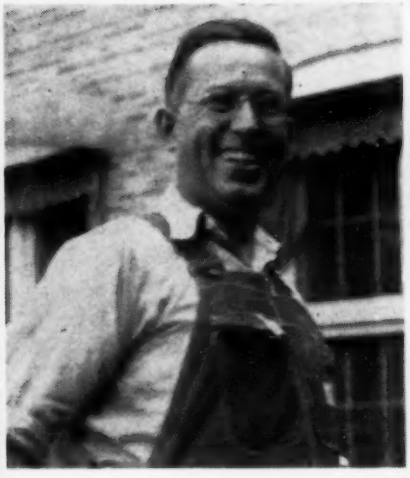
The writer does not believe it practical for the fruit grower to own his own bees, and try to maintain them throughout the year. Many orchardists have established apiaries at considerable expense, and due to the pressure of other interests, have abandoned the project. Beekeeping, to be successful, must be undertaken by those who are interested in the work with bees, and can devote the necessary time to maintain the proper conditions within the hives, inspect for brood diseases, and prepare them for the winter. Most orchard locations are not favorable to the keeping of bees due to the possibilities of poisoning from spraying and dusting, and the lack of the nectar producing flowers.

Hives and beekeeping equipment are expensive and a beekeeper must charge a reasonable rental fee for his bees if he is to remain in business. Reasonable losses must be considered where bees are moved out for rental, and the honey secured from the blossoms cannot be expected to compensate the beekeeper. Some years the weather may be favorable for nectar secretion, and the bees might store a super of honey, but this is usually utilized by the bees in brood rearing, and cannot be considered as surplus or profit. Bees left on their regular stands are usually better off. The labor of preparing the bees, and damage to equipment, queens, and an occasional poisoning, or smothering of a colony must be considered and the beekeeper who rents bees must charge for such services.

---

Massachusetts.







The bee yard at the left is one of the well located yards from the old days, high along the Mississippi bluffs. Above (left) present head of beekeeping department, G. H. Cale (Glory), with 700 colony ownership; (right), Roy Grout, junior member of Dadant & Sons, with 100 colony ownership. On editorial staff of the Journal.

•

# Dadant's Cooperative Apiaries







WHEREVER we go, other beekeepers ask "How many bees do you have in the Dadant apiaries?" "How do you manage to have such good help?" Where are your bees?"

Here is the answer. For many years all the bees were around Hamilton, Illinois. It is home. Locations were chosen in horse and buggy days when a few miles meant a long journey. It was difficult to go far from home to care for bees and help was reared to the job among those who were employed at other tasks in factory and office. Three hundred to four hundred colonies were enough.

Then came the hard road and the modern truck; and in the south the package industry flourished. It became easy to get bees; easy to go to them. Soon there were eight hundred colonies. That meant more help and steady help. Soon the help became expert; then they kept their own bees. The result was chaos. Something must be done or it meant teaching new beekeepers and losing them.

•

Three of the cooperative partners: (At top) Elva Kirlin, with 650 colony ownership, formerly manager of the Glenwood, Iowa, apiaries; now manager of the Hamilton apiaries. (Center) G. H. Cale, Jr. (Bud) partner with GH Sr.; research and breeding. (Bottom) William Carlile, with 250 colony ownership; assistant in research and breeding and in yard management.

About then Jean Chaneaux came from France. Said he "Do as we do in my outfit. Make your help partners and pay them well too." Timidly we started with one man. It worked like magic. Man after man came in until now we have had to close the door. There are ten men in the apiary department. All of them have bees that belong to them. Some get their start from the company; but they paid as they went from their own earnings. Also each have a job that suits him best and pays well. It is a combination hard to beat.

Now there are four thousand colonies in a mutually cooperative setup. Besides the home location, now expanded far over the countryside, there is a location in central Illinois, and one in northern Minnesota. In each place one of the partners is the local manager. Each partner has whatever bees he wishes in any or all locations.

Machinery, honeyhouse, trucks and common equipment are owned in partnership or shared on a cost basis. Daily records keep track of supplies, mileage and labor. A cooperative fund finances going overhead and invoices against each individual reimburse that account constantly. Profits from sales are allotted to each partner in proportion to ownership. Reciprocal labor pay may put any of the operators on the payroll of any partner as the season's management progresses.

As far as we know there is no plan in this country that is quite the same



Three sen'or members of Dadant & Sons, formerly the active yard managers of the apiaries. (Above) L. C. Dadant, (Louis). In his day carrying supers to the bees on Sunday, against a white shirt was very okay. Firm now has 1400 colony ownership.



H. C. Dadant (Henry) He still likes yard work and is absorbed in breeding. Likes to squat and think it over. New ideas get the right going over with him.



M. G. Dadant (Maurice, French; but we say "Morris") rapidly taking his father, C. P. Dadant's, place in world contacts. On editorial staff of the Journal.

as this one. However there are many groups that might at least to a degree, duplicate such a plan and it would save investment and insure management at all times.

Most of these pictures are of the group today. The members of the firm used to be the ones who did all the beekeeping work. Now they are content to let the co-op go along on its own. One of the men in the Hamilton group did not get his picture in, Paul Baldwin, who has about two hundred and fifty colonies. He runs strong to equipment and makes a fine job of most things he puts together. In addition he is the Hamilton manager's chief dependence for yard work. The place and job of the others is given with the pictures.

Most of us sell our honey cooperatively or through the firm. Some prefer individual selling. At no time is any partner held to any plan or any kind of management. He does with his bees as he wishes. Uses the hives he likes. Has his bees where he likes. He has full say. He also has full use of all labor, transportation, storage and machinery. In such a setup it is hard to keep a good man down.

(At right) W. F. Harter, manager of the Minnesota unit, with 500 colony ownership. Has son and son-in-law in with him. Likes the problems of the North and some of them are tough.
(Below) One of the Minnesota yards, with Louis telling what's-what to Harter.





(At left) Jack C. King, manager of the central Illinois unit, with a 250 colony ownership. With a long season he has a cute system of work so he does well with many bees and little help.
(Below) Another yard in the north in alsike clover.





# Direct Treatment of American Foulbrood

By Allen Latham

IN the fall of 1945 I treated a colony for American foulbrood by stirring a little powdered sulfathiazole into each diseased cell. The case was a mild one so that the total number of cells treated ran up to about 300. The result was so satisfactory that I tried in 1946 another method of contact treatment.

Early in 1946 we were advised to feed dilute sugar sirup with the sulfa drug in it. I tried this but was at once impressed by the slow results. It looked as if one would have to continue feeding all summer to get anywhere. Why not spray the brood itself with a solution of the drug?

I dissolved some sulfathiazole in hot water adding a little baking soda. The solution was placed in a small fly sprayer and the combs of five colonies were shaken free of most of the bees and sprayed in the brood portions. The result was so prompt that I felt at once that I had made an important discovery. But I felt that there must be a better solution, the one I had used did not keep well and was slow in penetrating the cells of disease.

I happened to have a half pint of pure alcohol. This was given one tablet of the drug and two badly diseased colonies had their brood sprayed. The result was simply amazing. Inside of one week more progress was shown than two months of the sirup feeding would show.

It was not easy to get pure alcohol and the cost was high. I had a gallon of alcohol that I used in my blowtorch. I began to use this to dissolve the drug. I sprayed ten or a dozen colonies having the disease and got miraculous results. Inside a week most of the combs were clean and there was a lot of healthy brood. In ten days the cure was so complete that one could not find a cell of disease.

In no case did I see any dead bees, nor indication that much, if any, brood was killed. Only a very slight spraying was done, just two or three pumps on the small sprayer for each side of a comb. The solution at once penetrated the capping of brood and seemed to make the removal of the dead larvae very easy. One strong colony that was very badly infected not only cleaned up its own combs but the combs from two other colonies.

I went through all the 15 colonies that had received the treatment about the middle of October and in none of them, save one, could I find a single cell of foulbrood nor any other sign. In one, the smell of the disease still lingered but otherwise there was no sign.

Next summer I shall try out wood alcohol to see if that is safe. Possibly rubbing alcohol will do. I can get all I wish of the brand I use for my blowtorch. It costs only a trifle over one dollar per gallon.

I wish to suggest to all readers of the Journal that they carry with them in their visits to outyards a bottle of alcohol, a supply of the drug and a fly sprayer. Dissolve one tablet, or whatever amount of powdered form one can take up on a penny, in half a pint of the alcohol and spray the brood of any colony found with the disease.

Yes—I may find an outbreak in some of those 15 colonies this coming summer—but I shall know what to do.

——— Connecticut.

## Is Our Face Red?

In our "What You Want to Know" department of the January issue, page 25, an article appeared over the signature of Dr. O. W. Park. This was a mistake which we wish to acknowledge. Dr. Park did not write the answer to Mr. Lepper. Dr. Park now calls our attention to several errors in the article.

The statement made by Mr. Kent Pellett, in the December issue, page 506, that parthenogenesis simply stated means that "females of certain species can, without mating, lay fertile eggs," is wholly correct. The mistake Mr. Lepper and we made in interpreting Mr. Pellett's statement was our failure to distinguish between **fertile** and **fertilized.**

As pointed out by Dr. Park, any egg that is capable of development is considered fertile regardless of whether or not it has been fertilized. A fertilized egg is one that has united with a sperm cell. Females of certain species, including the honeybee, lay eggs that develop even though they have not received a sperm. This type of development goes by the technical name of parthenogenesis.

It was further stated that the Dzierzon theory has been "somewhat exploded." Dr. Park points out to us that, throughout the full century that has elapsed since Dzierzon published his ideas with respect to the origin of the drone of the honeybee, his theory has been subjected to both extensive and intensive investigation by many of the world's most capable biologists. Today, it stands amply confirmed in all its essentials—slightly modified—but in no sense exploded.

The American Bee Journal accepts and appreciates this criticism and trusts that insertion of this correction will in some measure help to detract from any unfavorable reflection upon either Dr. O. W. Park or Mr. Kent Pellett.

## Wormley's Introduction

I read with interest the account by Ray Wormley, page 364, "A New Way to Introduce Queens." I have used this method and find it a sure-fire way. I go a step farther. I let the queen loose on a comb of emerging brood and if the weather is cool she will soon have a number of attendants to help her keep warm. I have never lost a queen by this method of introduction. A queen excluder may be laid on top of the paper and you will not have to look all through the hive for your new queen.

Ed S. Harris,
Ontario.

# Experience of An Itinerant Beekeeper

This is a compilation of the experiencies of an itinerant beekeeper. Who he is—is not important, but what he saw others try to do and accomplish, is.

Whatever the incentive, the beginner is definitely established in beekeeping when he receives his first journal and his equipment arrives K. D. Usually the equipment is assembled under the eyes of discouraging neighbors and friends who know all about bees and strangely enough dwell on the failures of other amateurs, said defeatism not registering on the beginner busily hammering away on his super shells and frames.

In April, when the four packages arrive, he begins to wonder if he can hive the bees according to instructions on the package. It is easy to feed the packages but one must lift out the queen cage and make a hole through the candy so that she can come out quickly. Not having the slightest notion on the characteristics of a queen he takes fifteen minutes to brush off the bees on the cage. If he gave the cage a quick jerk he might injure the queen which would be a tragedy.

However wooden and maladroit the backlotter may be the first season, he learns a lot in spite of conflicting articles in the journals concerning swarming, wintering, best race of bees, etc. Given about four more years he is as well informed on beekeeping in all phases as the commercial man, sometimes better informed.

The time arrives when the backlotter would like to become a commercial operator. If he has money he buys his own business. If he hasn't the money, which is more often the case, he goes about looking for a job with an established beeman whose huge operations have intrigued him via the feature articles in the bee literature.

In applying for his first commercial job, through the want ads, the backlotter makes the common mistake of crowding his letter with unessential details. The prospective employer usually replies with a short, concise business letter asking for specific details as to what the applicant can do, and references. That was the writer's case, at least. To complicate matters his father wrote to the employer respectfully asking that if anyone succeeded in getting any work out of his son to be sure and let him know.

When arriving on his first job, the itinerant beekeeper caused quite a bit of interest among the veteran employees at the apiary. In-as-much as he had come quite a distance to his job, the old observation that distance lends enchantment to the view, held true as the old help regarded the newcomer as an "expert." The foreman was diffident about assigning any menial jobs to the "expert" until one cloudy day, when the bees were extremely cross and the said expert seemed to get stung as much as the rest of the crew, to judge from his ugly language. After that things settled back to normal and the ex-backlotter started to learn the fundamentals of commercial beekeeping.

The universal fault of backlotters entering extensive beekeeping is that of wasting time, spending too much time on one colony. It is instructive, perhaps, to notice everything, but in commercial operations two good men should manage 1,000 colonies most of the season and to do this efficiently all the short cuts must be learned. Also, with several years' practice, the extensive operator can size up a colony in a very short time providing he knows the fundamentals perfectly.

It is interesting to observe the condition of the bees in different apiaries while unpacking in the spring. The apiary that has an abundance of stores in early April usually belongs to a very careful and methodical beeman who doesn't indulge in too much optimism about fall flows, which perhaps happen once in three years. It is like putting money in the bank to make sure the food chamber is crammed full of white honey when taking off the main crop.

When the writer first began working in commercial apiaries it was common to spread the brood and to reverse brood chambers, but as a rule nowadays it is thought impractical or not returning enough in additional bees or honey to pay for the extra time and labor. Now most colonies are given the run of three brood chambers up to the main flow. It is amazing what a large colony can be built up in three brood chambers providing all good beekeeping principles are observed, such as good queens and combs and plenty of stores.

Probably the biggest improvement in spring management is the use of pollen supplement. From the writer's experience 90% soybean flour and 10% dried brewers' yeast give as good results as any and he has seen just about all of the supplements used on a large commercial scale.

Undoubtedly pollen traps and dried pollen will become more and more popular but not among the larger beekeepers, I don't believe, as there is quite a bit of care and time connected with drying pollen and also some beekeepers won't care to cut down the production of one colony out of every fifty. Perhaps these beekeepers can buy commercial pollen by the barrel if pollen gathering grows in scope.

It is assumed that spring build up in the North must occur inside a much shorter time than in the South. This may be true when speaking of honey production only, but it is a different matter if we include package production. Each year brings more of a rush season as most northern producers are ordering earlier than they formerly did. Also more buyers are gassing weak colonies in the fall and replacing in the spring. Most of this increase in package buying is going to old established producers and to meet this rush requires a large crew. The writer worked at one place where thirty men worked, including one queen breeder who grafted about 800 cells each day, seven days a week and also did all the cell building manipulation. There were 6,000 baby nucs where two other queen men did nothing else but cage out and restock again with bees and cells. A crew of three men, with a truck, fed all the cell builders and nucs and shook the bees which replenished the nucs. In addition there was a large package crew using two large trucks, also several office workers. The package bee industry is really growing up in some parts of the South.

# Proud to Keep Bees

By Harry T. Starnes



Proud.

"PRIDE goeth before a downfall," said the wise man of old. Perhaps there are various degrees of pride, or could the old sage have referred to too much pride? I do not know. Pride is surely not leading to a fall if it causes a farmer to improve the appearance of his farm; nor is it so bad if it spurs the apiarist to paint his hives, or rejoice over a good crop of honey.

Well, be that as it may, I am proud to be a beekeeper in 1947, for I am engaged in a pursuit which is getting good publicity at a time when a new era seems to promise a bright future for a small segment of mankind, familiarly called beemen.

My paternal grandfather kept bees. But in those days it was not considered important to keep bees. In fact, one person often ridiculed another party by saying: "That fellow has bees in his bonnet."

When America engaged in the World War I, I was with the radio branch of the U. S. Navy. I did not take up beekeeping until 1939, and I soon learned of much of the stigma attached to trying to earn a livelihood with bees. People just would not admit that there could be much virtue in honeybees.

Now came the surprise. America entered the continued war again. Food was rationed, sugar soon was a highly sought prize. The radio advertised the fact that bees are important in the war effort, and soon the public, hungry for sweets, forgot to poke fun at beekeepers, and envied the humble apiarist.

What was the farm picture then? Farm prices were up 201 per cent from what they were in 1939, the year I started keeping bees; the things bought were up 179 per cent, giving a favorable parity ratio of 117 per cent. The farm mortgage debt had been reduced one billion dollars; farm cash reserves stood around 12 billion dollars; we had two and four-tenths billions in war bonds; farm inventories doubled. We have produced one-third more with help. Where do we go from here?

Well, we had pegged support prices for a time after V-day, that was



Electric power important.

a guarantee. Eventually war workers and soldiers trickled back to the farms. There will be a gradual curtailment of the demand for products of the soil, and this will come about after due allowance is made for increase for industrial needs. This much is also certain: The government, or any other agency, cannot keep prices upon high production for a period much longer than two years.

Electric power is important on the farm of today. This is why we are producing one-third more. Management and power is the explanation of the parity index hovering around 117 per cent, where it should be. The operation of beekeeping is one phase of agriculture.

With 300 colonies of bees, I come in the class known as small beekeepers. Using a power extractor, electric plane for uncapping, and a pick-up truck, it is not difficult to care for 300 colonies of bees, with much time for pleasant living, and a chance to take boom time or depression in their stride. This very fact is what is placing the farmer in the "looked-up-to" class.

It is a great help in the operation of bees to use power in the management, if one wishes to get out of the common labor class. It gives us things on the farm that other nations do not have. The intelligent use of these devices will continue. And more things of this kind are to come in the near future.

Now is the time to think, so let us try to think clearly. Perhaps in a few years we shall have surplus commodities; and if that time comes, someone will say that science is to blame, and that we should return to old-fashioned methods, and do all kinds of work by hand. If industry proceeds to make automobiles and airplanes by hammer and forge, I might consider turning my extractors by hand, the same as my grandfather did. The producers




Business finds farm a good market.

who manage well and make power and machinery work for them will be in the favored economic position in the future.

At this belated date the business world is awakening to the fact that the farm is a good market. It may not be long before civilian production will be abundant and we shall be deluged by salesmen offering all kinds of gadgets. They have heard that the farmer is prosperous. Let us have enough thinking power left to prevent us from buying a lot of knick-knacks and ending up with no cash when we need it most.

This is not too early for the small beeman to take stock, and look into the future. Pick your seat now. The future looks good,— and for me, I am proud to be a small beeman.

Indiana.

# Alfalfa Seed Production

G. F. Knowlton,
**Research Professor and Extension Entomologist.**
C. J. Sorenson,
**Research Professor of Entomology.**
**Utah State Agricultural College.**

ALFALFA blossoms must be tripped by pollinating insects in order to set a commercial seed crop. Adequate insect pollination and effective lygus bug control are essential to obtaining high alfalfa seed production consistently.

### Insect Pollination

Several species of wild bees as well as ordinary honeybees are the chief alfalfa pollinators. Adequate numbers of pollinating insects must be present and trip the blossoms if alfalfa seed production is to be consistently high. In the Delta area of Utah, alfalfa seed yields have increased during seasons when honeybee populations were highest. Seed yields were especially low from 1930 through 1933, when Utah honeybee populations were particularly low.

Honeybees are the only kind of alfalfa pollinators over which man has been able to exert much influence by regulating their numbers or manipulating their location. It is desirable to increase honeybee abundance in areas where these bees are actively gathering alfalfa pollen. This may be done either by raising more bees in the area, or by bringing in additional bees to be present for the period during which alfalfa is in blossom. Increased tripping by bees will definitely benefit the alfalfa seed industry.

To produce a profitable alfalfa seed crop it is essential to have an abundance of insect pollinators. Similarly, insects must transport the pollen from one plant or tree to another to produce a profitable cherry, apple, or pear crop. Actually, bees produce much more cash income for the alfalfa seed grower and orchardist than is procured from the yield in honey and beeswax, harvested by the beekeeper.

It is not unlikely that seed growers of the future will either own their honeybees or rent them from a beekeeper for use in tripping and cross-pollinating their alfalfa such as fruit growers do now. Cross-pollination not only results in a more abundant seed set but also in more vigorous seed. Bees are the chief agents of cross-pollination in alfalfa and many other seed and fruit crops.

In most areas, wild bee populations are not adequate to produce maximum pollination and seed yields. By bringing in large additional population of honeybees, alfalfa pollination can be greatly increased, with subsequent increased seed production and profit to the grower.

Honeybees do most of their tripping and pollinating of alfalfa blossoms at the time they are gathering pollen from the flowers. Pollen is the protein food of bees and is essential for the rearing of young in the hives. In addition bees occasionally trip alfalfa blossoms when collecting nectar. The extent to which honeybees trip and pollinate alfalfa blossoms varies considerably from one general area to another, depending on the availability of other plants from which pollen may be collected easier or in greater abundance.

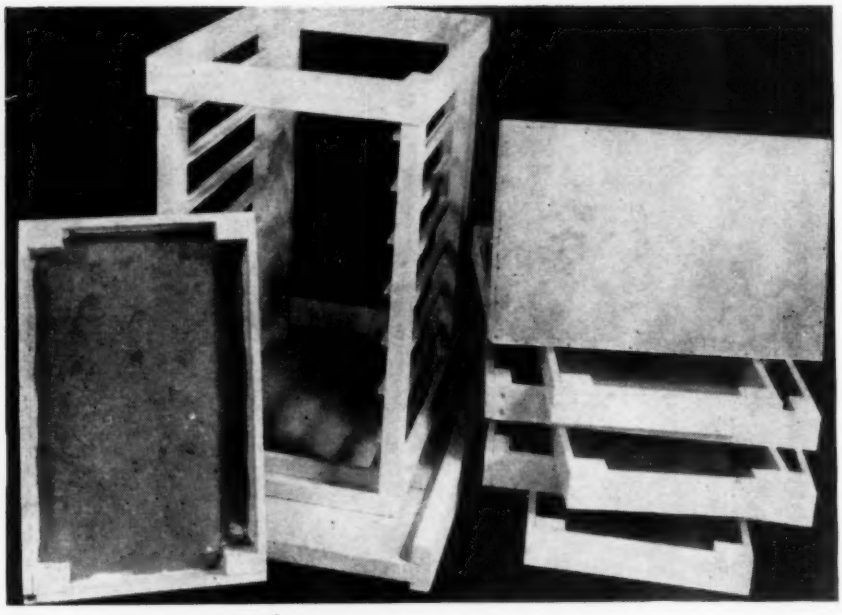
Honeybees are necessary for production of a profitable alfalfa seed crop because wild bees are not sufficiently numerous in the fields to perform all of the tripping and cross-pollinating that must be done. Vansell and Todd (1) report: "In Utah bees play an essential role in the commercial production of alfalfa seed . . . As a rule the amount of tripping in the field was proportional to the number of pollen collecting visitors . . . The production of a 500-pound seed crop per acre, it is estimated, would necessitate the tripping of at least 38 million flowers. In most of the fields observed there was an insufficient number of tripping insects to accomplish that amount of tripping. A scarcity of tripping insects may therefore be an important factor contributing to the present low seed yields . . . On plots from which DDT had eliminated **Lygus** and thrips . . . alfalfa flowered profusely on very long racemes, and many blossoms were being tripped by nectar-collecting honeybees."

Hare and Vansell (2) used pollen traps to determine the source of honeybee pollen, collected in the large Delta, Utah, alfalfa seed tract. Alfalfa pollen was found to compose about 32 per cent of the pollen collected from July 31 to August 21, 1944. No bee was observed to collect alfalfa pollen except by tripping the flowers.

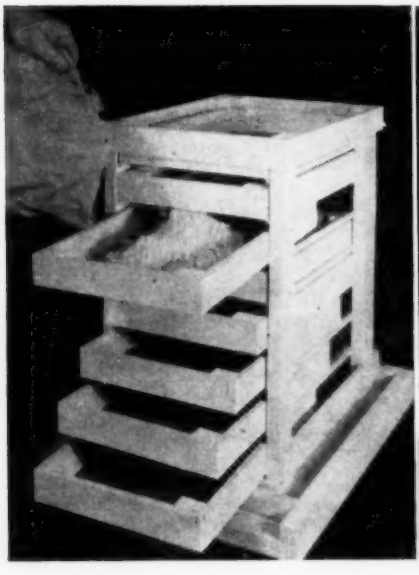
It is believed that the honeybee is responsible for nearly 80 per cent of all crop pollination performed by insects. A strong colony of honeybees in a good pollen location may gather 45 to 65 pounds of pollen during a year. To gather one pound of pollen, bees from one hive must visit more than eight million flowers. That makes approximately 360 million to 520 million flowers visited by bees from a normal beehive during one year.

Utah Extension Bulletin No. 150.

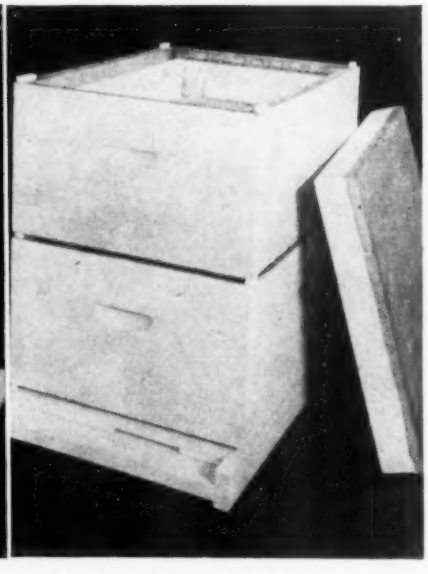
(1) Vansell, G. H. and Todd, F. E. Alfalfa tripping by insects. Amer. Soc. Agron. Jour. 38:470-488. 1946.
(2) Hare, Q. A. and Vansell, G. H. Amer. Soc. Agron. Jour. 38:462-469. 1946.



Dry pollen feeder. Rack holds eight pollen trays. (Photo from Ohio Experiment Station).



Filling pollen trays with dry pollen substitute. (Photo from Ohio Experiment Station).



Pollen racks with trays, set inside of a two-story hive. (Photo from Ohio Experiment Station).

# A New Feeding Device For Bees

By S. R. Winters

A rack having eight trays and the whole thing fitting into a two-story beehive, as a feeding arrangement for bees eating artificial pollen when natural nectar is unavailable, has been designed by the Ohio Agricultural Experiment Station. A single installation will afford nearly eight square feet of feeding surface, sufficient pollen material for 20 colonies of bees. This dry feeder is examined at least once a week and the substitute for natural nectar replenished when the supply has been depleted.

The dry feeding method for bees is of appreciable interest to beekeepers of the Midwest. The advantages are fourfold: namely (1) the entire apiary is fed at one operation instead of feeding each colony separately the pollen substitute; (2) dry feeding, instead of making-pollen cakes, obviates the usual labor required in preparing cakes for each colony; (3) from five to ten minutes is the required time for feeding the dry pollen whereas the placing of pollen cakes in each colony is more time consuming; (4) when dry feeders are put in the bee yards before the natural pollen is to be had this squashes the usual complaints of farmers that bees pilfer granaries or grain-feeding racks for substitute pollen. The disadvantages of the dry-feeding process are twofold: namely, (1) the weather must be propitious for bee flight if the bees are to collect sufficient dry pollen; and (2) brood rearing is slower in dry feeding than when the bees eat the pollen substitute in cake form.

The composition of this dry pollen is as follows: 4 parts of expeller process soybean flour of low fat content (5 to 7 per cent) and high protein content (48 to 52 per cent) are mixed with one part of dried skim milk. If brewers' yeast is substituted for skim milk six parts of soybean flour (by weight) are employed to one part (by weight) of brewers' yeast (animal yeast). The Minnesota Agricultural Experiment Station contends that the animal yeast is superior to dried skim milk for this purpose. The materials are thoroughly mixed before putting them into the dry feeder.

Prof. W. E. Dunham, of the Ohio Station, advises a proper safeguard of the material in the dry feeder against rain and dew. He has devised a simple protective measure; namely, by putting the dry feeder over a 10-frame standard bottom board of a hive, then placing two empty hive bodies on the bottom board with an outer, telescoping cover over the top body. Unhindered access to the feed is assured by placing a ¼-inch block of wood under each corner of the hive bodies and also under the outer cover. The entrance piece is put in the bottom board as "insurance" against mice invading the soybean flour.

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North Carolina.

# Mailing Queens

By Guy Diemer

As I understand it when southern beekeepers began shipping package bees about 45 years ago the cages were provisioned with candy and the losses were heavy and they could not ship packages in warm weather but as the business increased, progress was made by adding a small can of water or sirup. It was soon proved that sugar sirup was the best feed for package bees when shipped to northern states.

When beekeepers have package bees from the South, or move colonies of bees a long distance, provision is made to give them water if the weather is warm.

Queen bees and their attendants need water while in the mails the same as packages or colonies do when being hauled a long distance in warm weather. Giving them water before they are mailed helps but bees will only take water when they are thirsty. During one of the drought years ('33 or '34) our losses, on account of the heat on queens were heavy, so we began giving the attendant bees in each cage all the sugar sirup they would take just before they were wrapped for mailing and we still use this system. The caged queens are placed in rows on a work bench and the bees given one drop of sirup at a time with a medicine dropper until they will not take any more. During a heavy flow the 10 attendant bees in each cage will take about 2 drops of sirup, during a medium flow 3 drops, light flow 4 drops, and during a dearth of honey 5 drops. This should give them all the liquid feed and water they will need for 2 or 3 days.

Our losses on queens sent through the mails were then very light for several years and we thought the problem was solved but in 1941 we lost practically all the queens in several large shipments. I talked to the folks at the post office about it and their guess was about the same as you or I would make, "left out in the sun at some transfer point with the connecting trains running late." I then went to our local depots and watched them load and unload mail. I did not see any small packages so I suppose they were all in the pouches but a lot of the larger and medicine-size packages were handled the same as express is. Our guess that packages of queens could be left in the sun on mail trucks at transfer points seemed to be right.

As an experiment I then provided 10 cages with 10 worker bees in each cage, tying them together in packages of 5 each. One package was left in the same condition in which queens are usually mailed. On both sides of the other package I placed a piece of perforated cardboard as protection against the sun, tacking it to a light wooden frame so there was a ⅜ inch space between cardboard and cages. The perforations were made by punching ⅛ inch holes in the cardboard ½ inch apart each way.

The two packages were then placed on a metal cover in the sun on a hot day. The bees in the cages without the protection against the sun passed out within a half hour's time but those with the cardboard protection were apparently in good condition after several hours. A thermometer with a wooden back placed on the same metal cover registered 120 degrees and there was no breeze when this test was made.

We still use the sugar sirup and also put the cardboard protection on all but the small packages and during the past 4 years our loss on queens sent through the mails has been about one-half of 1% and I am not especially interested to know why we lose the few queens we now do. For quantity production on the perforated cardboard, nail 10 or 12 sheets to a board and drill the holes. Put in a light wooden frame the right size and fasten to packages of queens with a good grade of twine.

Missouri.

# Honey and Aluminum

On several occasions we have been criticized for stating that aluminum metal was satisfactory for honey tanks and for publishing an article which recommended painting the interior of extractors and tanks with aluminum paint. Consequently, we sought information from reliable sources and we think their replies will be of interest to our readers.

Morris Fishbein, M. D., editor of "The Journal of the American Medical Association," writes: "There is not the slightest evidence to indicate that aluminum metal could be in any way poisonous when used as a honey storage tank or extractor. The propaganda against the use of aluminum was wholly commercial and without foundation in adequate research. Research continues in a half a dozen places and evidence has already disproved this propaganda."

A chief chemist for the Casper Tin Plate Company, which has done much research on food containers, reports that aluminum in itself is nontoxic, and is used quite extensively in the food industry. He also stated that if aluminum were suspended in a suitable paint vehicle and remained intact on fabrication, and in the storage of honey, he could see no reason why it could not be used safely.

Another authority states: "There is no evidence that there is anything toxic about aluminum. A clean aluminum surface causes no ill effects. One can feed aluminum up to the point to tie up phosphorus but the amount needed to do this is tremendous. Otherwise this metal is entirely inert." However, this authority questions the advisability of using aluminum paint due to the possibility of toxic materials in the paint, and would not recommend painting tanks.

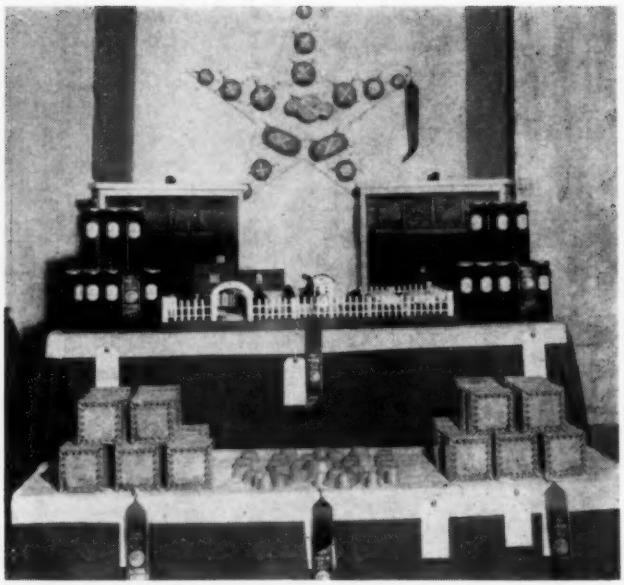
## Electrical Heating in Britain

TECHNICAL REPORT No. 13 of the British Electrical & Allied Industries Research Association has just been published.

It has to do with experiments on the electrical heating of beehives and consists of 12 pages written by the noted English beekeeping author, E. B. Wedmore.

The gist of the experiments is that there has been very little value in electrical heating as tried in the beehive over the checked colonies handled in the ordinary way.

The experiments will be continued further.



First premium on sections, wax, bottles, exhibit. The amateur exhibit of Lawrence Rapp, Morton, Illinois, at Illinois State Fair. Photo taken by Inspector Killion's son, Carl Killion.



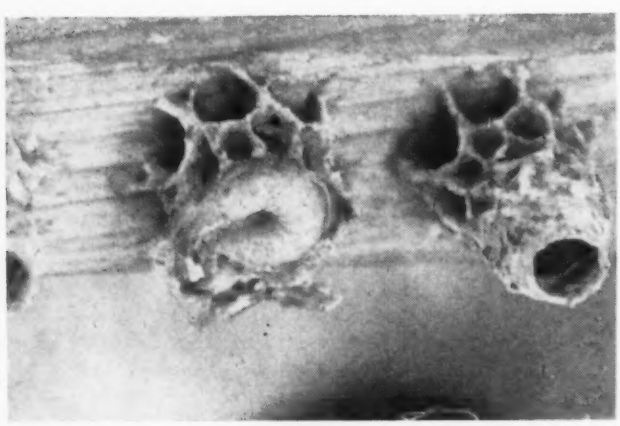
E. C. Bessonet uses baby nuclei in queen rearing much like those used by Swarthmore in earlier days. When the small nucs are posted in groups on runners, row by row, they make an imposing sight.




Another shot from Carl Killion, Jr. This time it is the Champaign County Beekeepers' Association exhibit, shown by Keith R. Wilson, Tolono, Illinois at the Illinois State Fair.




Western, Oklahoma Asscciation's exhibit Farmers' Day, Elk City. Shows how to feed sulfa, how to prepare honey for market, how to control swarming and contains various equipment. Association plans educational tours.



Johnny Hogg, Tifton, Georgia has sent more downright fine photographs of bees than we have ever had from any other source, here queen cells on the bar, one open to show larva.



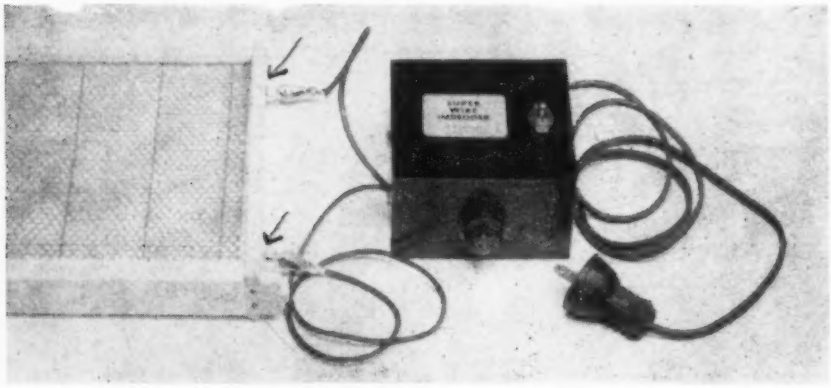
Miss Elsie Reiter, Benson, Illinois, is proud of her eight colonies and that she manages them alone. Hiving swarms seems to excite her. She gives a three page account of her experiences.

# DEPARTMENTS



LIKE this little girl? We have some at home that take to honey the same way. (Picture from Steve Hanagan).—Take a fling at How-to-do-its. Those picture items capture a five spot. The others a three month subscription extension.—If you have a puzzling question maybe you can get help in What You Want to Know. If we do not have an answer, it is likely we will know someone who does.

# HOW TO DO IT



## Quick Embedding

I use the electric wire embedder to fasten foundation into frames. I have found, when wiring the frames, that a quarter inch of wire should be left protruding from under the nails at each end of the wire, so the clips of the wire embedder may be attached to the wire ends easily. Later the wire ends may be broken off.

When using the embedder on old frames which are already wired, press a thumb tack or carpet tack into the side of the frame and in contact with the nails that hold the wire. Then place the embedder clips on the tracks. After the foundation is embedded the tacks may be removed.

When removing old comb from frames the heat of the embedder can be adjusted to melt the comb so it will become loose and drop out. If cross wired foundation has been used be sure the cross wires are on the bottom, or below the frame wires, when the embedder is turned on.

Carlton Beebe, New York.

### TO KEEP OUT MICE

For a long time I tried to find a way to keep mice from entering my hives and damaging the combs in winter without having to place a screen on the entrance that might shut the bees in. At last I have found a way. By placing a queen excluder between the bottom board and the bottom brood chamber the mice cannot get in. An upper entrance is provided because the queen excluder may be clogged with dead bees by spring.

—Paul Ekblod, Wisconsin,

### EXTENSION FOR A HONEY GATE

Weld a half-inch cap or coupling onto one of those honey gates which are usually so hard to regulate. Screw into it a piece of pipe a foot long. You will be surprised what a difference it makes. I have broken two gates trying to loosen them with a hammer when they are stuck.

Wm. H. Elges, Iowa.

### VASELINE FOR SECTION FOUNDATION BLOCKS

To prevent thin surplus foundation used in sections from sticking to the wooden blocks so many beekeepers use in fastening in the top and bottom starter, apply a small amount of vaseline to the working surface. It will make a surprising difference in the ease with which the foundation can be slipped into place when fastening it with heat to the wood of the section.

Carl Killion, Illinois.

### EMERGENCY LUMBER

I get my grocer to save me cantaloupe crates that have about nine or ten pieces ⅜"x1¾"x24". In these days of scarce lumber I use these pieces to make a rim of a telescope hive cover. I get grape boxes of thin material and nail on top of this rim. Use paper roofing or sheet metal to cover. These grape crates are the right length to go crosswise of a 10-frame hive and are mostly of fine white pine and easily worked. They are not as heavy as standard covers but they answer the purpose.

S. M. Kennedy, Pennsylvania.

### ICE CREAM TOPPING

If you like ice cream and honey try this. Mix one part of peanut butter, one part honey and add milk to thin to the desired consistency. Stir well. Pour this over ice cream. You will be making your own sundaes, thereafter.

Edgar D. Gehris, Pennsylvania.

### EARLY POLLEN FEEDING

I begin feeding pollen supplement the last of January, which in this climate is too early to open the hives and feed above the frames as is usually recommended. When we wrap our hives in fall we leave on an empty shallow super, without frames. This is usually filled with some insulating material. The hives are wrapped and the paper folded over the top of this super. The outer cover is then put on carefully so as not to tear the paper.

When ready to feed, pollen supplement in paste form is placed in small paper plates. The slot of the inner cover is opened and the plate of pollen inverted over the hole. The insulation is then pulled back over the whole thing. This means of packing permits easy feeding of supplement or sirup without disturbing the inner cover.

When the weather becomes warmer we use supplement over the frames in the usual way but feed sirup through the inner cover if necessary. By folding the paper and then putting on the outer cover over the top, rain and snow is kept out of the wrapping.

D. N. Cammack, Wisconsin.

# WHAT YOU WANT TO KNOW

Mr. Frank Kaczor, California, wants to know if calcium arsenate applied to tomatoes will kill bees.

Dr. J. E. Eckert, of the University of California, replies:

Calcium arsenate that is applied to tomatoes will kill bees for as long as the calcium arsenate is available to them. The poison is a heavy metal and does not decompose on exposure to air. The bees are generally poisoned by the dust during the time of application over other plants on which the bees work for pollen or nectar.

Recent research work has determined that DDT can be used as a more effective insecticide than calcium arsenate in the control of tomato insects and I feel quite sure that DDT will not be as destructive to bees as calcium arsenate. If the tomato growers in your vicinity would use DDT instead of calcium arsenate I feel sure that it would, at least, partially solve your poisoning problem and provide efficient control of tomato insects.

* * * *

G. R. Hardison confronts the annual problem of feeding a pollen substitute. He has read L. F. Childers' reports on feeding substitutes and thinks that it is interesting and wants his formula. He has 230 colonies in one yard and would like to feed pollen substitute but prefers not to do it in the open since that many colonies might result in considerable of a scramble. His major flow starts the first of April, too early for the bees to build up to full strength without some help. There is plenty of pollen in his area to be gathered in January, February and March, although they cannot gather the pollen regularly. He wants to know when to begin feeding.

In the first place Mr. Childers' formula is as follows: Five pounds expeller process soybean flour, 2 pounds animal type brewers' yeast, 2 quarts water, 2 measured quarts of sugar, and 2 quarts of honey, heated to 138° for fifteen minutes. Mix the material while the honey is still hot as it mixes easier. If you wish to add sulfa to the material add about one teaspoonful. When it is thoroughly mixed you will find that you have a soft paste, which may be fed directly over the bees or into empty combs and given to the bees that way. Mr. Childers says the bees take it eagerly.

You will have to begin feeding in February as early as possible if your flow occurs the first of April. About 2 pounds for feeding is desirable, each feeding ten days apart. Don't let the bees get out of the substitute. If they refuse to take it, stop to prevent waste.

* * * *

Lloyd Klopfenstein, of North Dakota, is interested in plans for a bee house. He asks if a bee house is practical to keep bees in all winter if provided with controlled ventilation to prevent overheating on warm days.

There used to be a few bee houses in the United States, but they have pretty well passed out of the picture. We have ample room in this country in ground area on which to set out bees, and in a great many ways the bee houses did not prove feasible. The bee house requires a large capital investment.

In most places wintering outdoors is sufficiently satisfactory not to require either a bee house as a winter depository or a cellar. However, a few now use an insulated building with thermostatically controlled heat for wintering bees. Bees so wintered use little stores and conserve their energy better than outdoor wintered bees.

* * * *

Mrs. Sadie Richmond, Illinois, is confronted with the common problem of finding combs of honey in which the honey has granulated and she wants to know what to do.

It is difficult to liquefy honey in the combs except in a heat-controlled chamber which is kept at a temperature just short of the melting point of wax, for a considerable time. Then the honey may be extracted and any remaining crystallizations may be melted out with heat.

To give these combs to the bees in the spring is satisfactory. They may waste some of the honey but not much.

* * * *

A Montana beeman writes: "I have a disease problem aggravated by the fact that combs in bee trees are not destroyed by wax moth after the bees die out. They are reoccupied by stray swarms which live long enough to store considerable honey which is again robbed out after they die. Do you think that wax moth larvae in the cocoon could be sent north and allowed to hatch in the timber and do much good in destroying such combs? This lack of wax moth is of course a blessing as far as comb storage is concerned but it is too bad that these diseased combs are not destroyed."

It would be easy to establish the wax moth in a favorable environment by the simple expedient you mention. However, there seems to be an area in high altitudes where it cannot live. We are told that it has been brought into some neighborhoods in the Rocky Mountain region again and again but that it always disappears shortly for some unknown reason. In such an area it would be useless to introduce the pest.

While the wax moth does render a service in destroying the combs of stray swarms that die of disease it is so destructive to stored combs where it is plentiful that we would prefer to take our chances on the stray swarm than to be ever on the alert against the damage from the moth. In some regions the wax moth is the cause of greater losses to the beekeeper than disease.

* * * *

Acey Zornes, Indiana, wants to know if he can kill his old queens in his best producing colonies in the fall during a buckwheat flow and depend on the colonies to produce a good young queen for fall brood and winter.

If this can be done during a honeyflow, it may work but it must be done before the drones disappear or the queens will not mate. Perhaps a better way would be to de-queen one colony, let it raise cells then transfer ripe cells from one colony to the other, taking their queens out. If you have queen cages, you might hold a few queens above a strong colony for several days to make sure that each of your colonies to which cells have been given get their queens mated and laying.

# American Honey Institute

It's time to get ready. Early next month an event is to be celebrated which is of the greatest importance to all those who have an interest in honey. Honey for Breakfast Week will be nationally observed during the week beginning on Easter Sunday, April 6 and continuing until April 13.

Every bee supply dealer, beekeeper, honey packer, and honey seller will want to help promote this event. One good way is to distribute leaflets issued by the American Honey Institute. Among the leaflets which we think are especially appropriate are "Honey to Start the Day Right" and "Honey and Cereals." Both of these leaflets sell for 60 cents per hundred copies.

Other suitable leaflets are available, too. "Honey the Clock Around" (60 cents per hundred) provides recipes showing that honey for luncheon and dinner is the best way to follow honey for breakfast.

"Two Sweet Gifts from Nature, Citrus Fruits and Honey" ($1.00 per hundred) contains an excellent recipe for Orange Honey Ham, a delightful variation of the tradional Easter treat.

Place your order now so that you will be able to distribute these leaflets before and during Honey for Breakfast Week. Remember that this celebration was designed to give you a wider market for your honey. A good publicity program this year means a better market next year.

* * * *

During recent years a great deal of emphasis has been placed on nutrition. Through an expansive educational program, the American public have become conscious of the nutritional value of the foods they eat. Posters, magazine and newspaper articles, movie short subjects, lectures, Red Cross classes, and women's club activities have been devoted to improving the diet of the nation in order that its health might not be impaired by necessary wartime restrictions. As a result, some housewives have grown accustomed to serving foods that they had never tried before. The women who tried honey for the first time during these years have joined the many who have used it for a long time in their enthusiasm for the extra benefits of honey. Through the activities of the American Honey Institute, our people are realizing that honey is a delicious, delightful, and highly desirable component of the balanced diet which should be standard for all in the modern world.

* * * *

Ladies how do you rate as a meal planner? The meals you serve during Lent are a good test of your cooking ingenuity. Lenten meals can and should be interesting as well as nutritious. The absence of meats and rich deserts demands the addition of tasty, filling and nourishing foods. Among the most popular features of Lenten menus are unusual hot breads. You will find Honey Currant Muffins especially good.

**Honey Currant Muffins**

1 cake compressed or dry granular yeast
¼ cup lukewarm water
½ cup milk
¼ cup honey
1 teaspoon salt
¼ cup melted shortening
1 egg
2 cups sifted flour (about)
½ cup currants

Soften yeast in lukewarm water. Scald milk and cool to lukewarm. Add honey, salt, and shortening. Beat egg and add. Blend thoroughly. Add 1 cup flour and beat well. Add softened yeast. Add currants and remaining flour to make a moderately stiff drop batter. Beat until smooth. Cover and let rise until bubbly (about 1 hour). Stir down, pour into greased muffin pans, filling pans about half full. Spread batter with honey and sprinkle with cinnamon and chopped nuts. Let rise until double in bulk. Bake in moderate oven (375°F.) 20 to 25 minutes. Yield: 1½ dozen 2-inch muffins.

* * * *

An important announcement: We are happy to report that we again have the leaflets, "Make Every Meal a Guest Meal with Honey Recipes," in stock. Those of you who have honey for sale, especially, will want to order some of them. One of our most convenient ones, this leaflet is shaped to fit a five-pound pail of honey.

* * * *

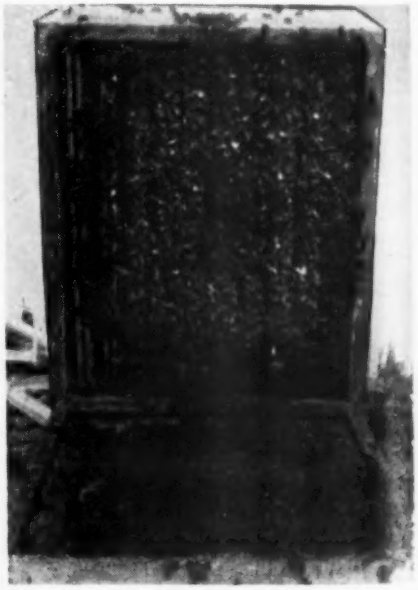
One way to cut down the labor involved in cake making is to cut down the number of dishes used. Sift the dry ingredients onto pieces of waxed paper instead of into bowls. After all the dry ingredients have been added to the batter, use the waxed paper, trimmed to fit, to line the bottoms of your cake pans.



**Madame and M. Rousseau discussing a bee book while visiting the Pellett Gardens at Atlantic, Iowa, last summer. The Rousseaus now are in France where Mr. Rousseau is director of the Laboratoire National Apicole. (Photo by Dr. O. W. Park).**



**L. J. Devoe, Houlton, Maine, has bees on runners on posts. The center hive with new swarm is of black (German) bees; "in my mind no good," he says.**



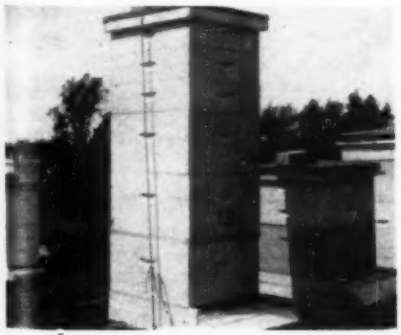
**A "right smart" winter colony, with the two hive bodies lifted apart. The picture comes from Dr. Farrar at Madison. Such colonies result from winter brood, made possible by an abundance of pollen and honey.**



Alderson Frye, Nashville, Tennessee, has this observation hive in his dining room. Hive is about 12 inches square extending upward about five feet. Glass double thickness, flint. Sections are above an excluder.



Miss Emma Schmidt, Kellogg, Minnesota, Secretary-Treasurer of the South-East Minnesota Beekeepers' Association. Formerly president of the state association. Operates nearly 700 colonies and is a deputy inspector. (Photo from C. G. Langley).



L. J. Devoe again (Houlton, Maine). This colony produced over the commercial hundred pounds. No swarms. Had to "hold 'er, Newt" with that guy wire at the side.

# News of National Federation

### Beekeeping Is Big Business

In line with the growth of the beekeeping industry is the growth and development of beekeepers' organizations.

Local groups are becoming more active, state and regional organizations are gaining in importance and growing in size, and the Federation has definitely passed the period of infancy. With this passing of the period of infancy it has become necessary to make some adjustment of raiment and some provision for a more permanent and more satisfactory method of financing its activities.

This was given long and serious consideration at Tampa, and it was agreed that the office of the secretary could not function to best advantage if a major portion of the time of the secretary must be spent in an effort to raise the funds necessary for continued operation.

After due deliberation it was suggested that the number of regions be increased from five to ten and that the regional representatives, who are members of the Executive Committee, would be charged with the responsibility of getting proper financial support from their respective areas.

The new regional representatives and the regions they represent are as follows:

Region I—Washington, Oregon, Utah, Idaho; D. B. Bradshaw, Wendell, Idaho.

Region II—California, Nevada, Arizona, New Mexico; W. LeRoy Bell, Box 42, Orange, California.

Region III—Montana, Wyoming, Colorado, Nebraska, South Dakota, North Dakota; J. W. Holzberlein, Jr., Grand Valley, Colorado.

Region IV — Texas, Lousiana, Arkansas, Oklahoma; Roy Weaver, Navasota, Texas.

Region V—Kansas, Missouri, Iowa, Minnesota, Wisconsin; Newman I. Lyle, Sheldon, Iowa.

Region VI — Illinois, Michigan, Indiana, Ohio; Oscar Schmidt, Rt. 4, Bay City, Michigan.

Region VII—Mississippi, Alabama Georgia, Florida, South Carolina, North Carolina; G. G. Puett, Hahira, Georgia.

Region VIII—Kentucky, Tennessee, West Virginia, Virginia; John M. Amos, 403 State Office Bldg., Nashville, Tennessee.

Region IX—Maryland, New Jersey, Delaware, Pennsylvania, New York; John H. Hess, Rt. 2, Mechanicsburg, Pennsylvania.

Region X—Maine, Vermont, New Hampshire, Connecticut, Massachusetts, Rhode Island; Charles Mraz, Middlebury, Vermont.

Following the same general line of thought, it was agreed that the News Letter should be confined to the dissemination of information and should not, hereafter, contain any appeal for membership or funds.

It was also directed that the News Letter should be sent to each person who is a member of any beekeeper's organization, and this will be done as rapidly as mailing lists can be prepared.

This change will be welcomed by the beekeepers and the secretary will be able to render a much greater service to the industry.

* * * *

### Heard In Tampa

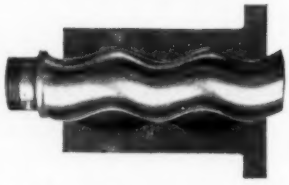
How do you like the weather? . . . where is the meeting to be? . . . it rained on us for two day . . . where will the executive committee meet? . . . my fur coat isn't doing me any good here . . . I'm looking for that inspectors' meeting . . . We came down the east coast and want to go back through the Smoky Mountains . . . the ladies' meeting isn't today, it will be tomorrow . . . You just must see Bok Tower . . . they must all be here . . . . that cafeteria around the corner is all right, we ate there last night . . . you go down two blocks and then across the river, just a nice walk . . . none of the bees we have can be called good . . . all these lakes are full of fish . . . I brought down a load of bees and . . . those pictures Jay Smith showed were mighty fine . . . We want to go to Sarasota before we go back . . . I had to buy a whole outfit of summer clothes.

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Three Banded Italian Queens as good as can be raised. Health certificate with every order.
Untested—1 to 25 ..... $1.25 each
25 to 50 ..... 1.20 each
50 up ..... 1.15 each
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NO MORE PACKAGES this season.
Queens after June 1st, $1.25 each.
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**ITALIAN BEES AND QUEENS**
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Health certificate with each shipment and live delivery guaranteed.
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# Men of Today



## Henry W. Weatherford

The distinction of being one of the best comb honey producers in Virginia first attracted Virginia Polytechnic Institute to Henry W. Weatherford, of Vernon Hills. His outstanding success in that line caused the experiment station at Blacksburg to hire Weatherford as a part-time extension specialist in beekeeping. He has continued this work for many years and is also part-time inspector of apiaries for the Dominion state.

Just how he gets all that work done and runs 145 colonies of bees well is a tribute to his hard work, as most Virginia beekeepers have learned to know him. A glance at his apiary and his nice farm home at Vernon Hills indicates that he believes in hard work and keeping everything in its place. No doubt that is the secret of his success.

Mr. Hiett tells us that Weatherford tricked his wife into marriage although he does not say how. Hiett claims as a result of his success in inducing Miss Kathryne Holt, of Halifax, Virginia, to marry him he has to cook breakfast every morning and wash the dishes every night! That is a burden, if true, that we hope other inspectors' wives will not emulate.

Starting with bees in 1915 in Halifax County, Weatherford served in World War I, and again Hiett tells that his experiences in France convinced him that American girls make the best wives. He was married at Halifax in 1925, has two girls and one boy, and claims that neither his wife nor children are much interested in bees.

Weatherford's main interest, aside from comb honey production, lies in bee diseases, swarm control and better breeding stock. Plenty of room for that in the mountain country as much of the commercial production is concentrated in the Piedmont section and coastal plain. He prefers the 10-frame hive and leather colored Italians.

His work as extension specialist makes him responsible to the extension division and to Dr. W. J. Schoene, of Blacksburg, entomologist of the experiment station. His work in bee inspection makes him responsible to G. T. French, state entomologist at Richmond. Again Hiett writes that "Weatherford gets around over the state and visits most of the beekeepers but just how he does it on part-time schedule no one knows." Those who point the sluggard to the bees and ant may find their counterpart for work in Weatherford.

Kennith Hawkins,
Wisconsin.

## U. S. Honey Production

A complete report of honey and beeswax production in the United States for 1946 became available through the Bureau of Agricultural Economics at Washington, D. C., on January 24.

There were 214,000,000 pounds of honey produced in 1946, which is 8 per cent less than in 1945. The average was 36.9 pounds per colony.

Of beeswax there was produced 4,500,000 pounds.

The average price obtained by the beekeeper for his honey was 24.4 cents per pound, and for beeswax 44.4 cents per pound. California ranks above all others in the production of honey with approximately 22,000,000 pounds, Minnesota having 18,000,000, Iowa 17,000,000, Florida 15,000,000 with Texas, Indiana, Illinois and Wisconsin following in order. Michigan fell far below usual averages owing to drastic conditions for honey there during 1946.



# Meetings-:-Events



### New Southern Bee Magazine

The first copy (January, 1947 issue) of the Southern Beekeeper is out. It is an attractive 24-page magazine (same size as A.B.J.) with a red and black cover. The editor is Allen H. Hale located at P. O. Box 94, Hapeville, Georgia (suburban Atlanta).

The magazine is well set up and published with the intention of serving southern beekeeping interests. It has a feature article on "Florida's Fight for Sulfa," by F. S. Houston, of the Tampa Association. Also a progress report on the sulfa by J. R. Reinhardt.

Southern leaders who are to help guide editorial policies include J. J. Wilder, W. J. Synott, F. B. Meacham, E. D. Cutts, J. M. Amos, G. G. Puett, S. J. Head and Jay Smith.

There is a definite need for publications serving special sections of the country, and we sincerely hope that Editor Hale and his charming wife, who is assisting him, may have every success in this field of endeavor.

The magazine sells at a subscription rate of $2.00 a year.

### Beekeeping Field Day, Columbia, Missouri, April 23

The planning committee of the Missouri State Beekeepers' Association has planned a Beekeeping Field Day to be held in Columbia during April. The tentative date is Wednesday, April 23rd. Prominent speakers on pollinization, honey production and other timely practices will be presented. Field examination of colonies being treated with sulfa will be made and demonstrations will be given on the use of sulfa and on providing pollen substitutes.

### Bronx County (N. Y.) March 9

The Bronx County Beekeepers Association will hold its next monthly meeting at the home of Mr. Peter Gutman, 2958 Roberts Avenue, Bronx at 2:30 P. M., Sunday, March 9, 1947.

This promises to be a very interesting meeting. Bring your bee problems for discussion. To reach Mr. Gutman's home take Pelham Bay subway to Buhre Avenue.

Sam Roberts, Sec'y.

### Greenville, North Carolina, March 14

The North Carolina State Beekeepers' Association will hold its annual meeting in Greenville, Friday, March 14th, in the Agricultural Building. This will be an all day meeting beginning at nine A. M., and a good worth-while program is being arranged. The Association was organized in January, 1917, and this will be its 30th anniversary. It is a general beekeepers' meeting and the interested public is cordially invited to attend. In addition to local talent on the program, Mr. George H. Rea, Lecturer and Representative for the National Federation of Beekeepers' Associations, will give an address. Mr. Rae has had a wide range of experience in bee culture activities and will bring us a worth-while message.

A series of meetings are being arranged about this time for the State by Mr. W. A. Stephen, Extension Bee Specialist, State College, Raleigh—perhaps in Charlotte, Greensboro and Hendersonville. For further details,

## Notes on the Tampa Meeting

(Continued from page 114)

southern breeder to the northern buyer. He said the "hobo bees" accompanying packages might be one of the difficulties in getting acceptance, but that it was coming.

Some few of the delegates came by plane, some like myself by train, but most by car. Planes were grounded for several days in that southern section. A lot of the folks with their families stayed over to take in the various sights of sunny Florida.

No wonder the planes were grounded. All the way through Georgia coming home, streams were bank full and it was either raining or there were heavy fogs. The only time we saw any of the common field and road fires was before we left Florida which still had its dry weather.

Florida weather was balmy, in fact too much so for some of us snowbirds. Pennyroyal was blooming. It looks like they might have an early start unless later freezes come on. No frost down there up to February 1.

Dr. and Mrs. R. L. Parker, of Manhattan, Kansas, had the misfortune to have an automobile accident while crossing through Missouri on the way down. Mrs. Parker we understand, had both wrists broken. We hope they are back at Manhattan and she is on the mend.

Rather pleasant weather greeted the writer on his return home January 19, though the weather went to zero a few days later.

Some of the "old timers" at the meeting were Allen Latham, of Connecticut; Jay Smith, of Florida; A. C. Allen, of Wisconsin. E. R. Root did not attend on account of difficulty with his eyes. We missed him.

There must have been a hundred women folks at the convention and they seemed to be having a grand time. The Tampa Chamber of Commerce had certainly extended themselves to show the ladies around. Besides there were a number of private parties over to Silver Springs, the Bok Tower and the Cypress Gardens for afternoon outings. In addition, numbers visited St. Petersburg, Clearwater, and other nearby gulf points.

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4-lb. with queen ..... 6.00
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| American Pigeon Journal, squab—fancy | 1.50 |
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| California Rabbits, monthly | 1.00 |
| Rabbit News, (Calif.) monthly | 1.00 |
| International Commercial Rabbit Journal, monthly | 1.00 |
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contact Mr. Stephen at the above address. Frank B. Meacham, Sec'y.

### Apiary Inspectors of America

The three or four meetings of the Apiary Inspectors of America during the early part of the national session were punctuated particularly by discussions over the use of sulfa and possibility of eliminating or restricting trade barriers.

It was the sentiment of the inspectors that in addition to certificates for moving bees across state lines, the inspector should furnish point of destination and the history of the apiary or apiaries from which such shipments were made.

It was stressed that such certificates as issued should state whether or not sulfa had been fed to the bees which were concerned in the certificate, since the feeding of sulfa is not yet being generally approved.

It was further stated that it was the consensus of opinion among the inspectors that sulfa should not be substituted for burning, pending further investigations.

Also that certificates should not be issued for bees on combs without the destination first being learned and given to the official in the state of destination, and that any certificates issued should be issued by the state official in charge of apiary inspection.

Dr. J. A. Munro was chosen president for 1947 and Dr. F. L. Thomas, State College, Texas, was chosen secretary-treasurer.

### Todd of Bee Culture Laboratory to Utah

A legume seed research station for the investigation of the problems connected with the production of alfalfa and other forage crops has been established at the Utah Agricultural Exp riment Station at Logan, Utah. Participating in it will be the Utah Experiment Station, the Bureaus of Entomology and Plant Quarantine and Plant Industry, Soils, and Agricultural Engineering of the United States Department of Agriculture. Frank E. Todd and G. E. Bohart, of the Bee Culture Laboratory, are scheduled to have a part in the investigation together with a group of five other men representing other departments.

As mentioned in our magazine previously, experiments along this line were conducted in 1946 with the result that great benefit was shown by spraying for lygus bugs in proper development of the bloom of the alfalfa. It is also shown by introductory tests and experiments that the honeybee has more to do with the pollination of alfalfa than has been previously supposed.

In 1925 Utah was producing a $22,000,000 alfalfa seed crop and farmers were raising as much as six bushels of seed per acre. Since then, yields have declined to one bushel per acre. It is now planned for a thorough investigation of the whole problem, especially after 1946 tests showed that seed yields could be increased 600 per cent by destroying the lygus bugs and proper application of bees for pollination.

Acute legume seed shortage and additional appropriations by Congress for remedying make this investigation possible. Mr. Todd will be remembered as having earlier been with the Bee Culture Laboratory at its California station, then being moved to Washington, D. C.

### New Jersey Meeting April 19

The Bergen County branch of the New Jersey Beekeepers' Association will meet April 19, 1:00 P. M., at Wheaton's apiary, 202 Wood St., Rutherford. Topic: Division of Colonies during Fruit Bloom; Swarm Control; Package Bees. Plans will be discussed for a honey exhibit and dinner to be held at the county seat under the direction of an all-ladies committee with Mrs. W. W. Blauvelt, Hillsdale, chairman, Mrs. Fred Conrad, Woodcliff Lake, vice-chairman.

Richard A. Geoghegan, Sec'y.

## Killion Wants Foreign Honey Samples

Carl Killion, state bee inspector for Illinois, and in charge of the apiary exhibit at the Illinois State Fair, is desirous of getting samples of honey from foreign countries for making an outstanding display. Any of our foreign subscribers who would be interested in sending postpaid a small sample of honey, Mr. Killion will appreciate, and will be glad to reciprocate. His address is Paris, Illinois.

## Refund of Tax On Sugar

The American Bee Journal has had so many requests for information relative to the proper procedure in filing claim for refund on tax on sugar fed to bees that we have prepared the following for the information of our readers and for those interested.

Bear in mind the following pro-

cedure must be met in order that the claim will be properly recognized by the district in which you filed your return and properly O.K.'d by the Internal Revenue Collector's office at Washington, D. C.

Here are the requirements:

1. Claim for sugar tax refund must be made within a year from date of purchase of sugar.

2. Claim must be filed on blank Form 843 available at any District Internal Revenue office.

3. Completed form 843 must be accompanied by additional statement of (a) date of sugar purchase, (b) amount of sugar bought, (c) by whom sugar was manufactured, (d) approximate date sugar was fed to bees, (e) receipted invoice for each sugar purchase.

4. Claims are preferably filed in duplicate so that one copy may be sent by the District office to Washington, D. C. Keep an additional copy for your own reference.

5. The refund is .00535 cents, or a little over ½ cent per pound.

Specimen copies of the various blanks as we made them in filing our own claim will be sent to any who wish them, so that they may have something to go by. In the meantime write for your copies of blank form 843.

## New British Queen Rearing Book

From L. E. Snelgrove, who will be remembered as the author of several books on various phases of beekeeping including queen introduction and swarm control, comes a new book entitled, "Queen Rearing." It is a book of 350 pages, cloth bound, well illustrated, and a thorough treatise. In fact we know of no other in the English language as complete. The Perret-Maisonneuve book of France is still the most diversified perhaps. Mr. Snelgrove first gives a life history of the queen, a discussion of brood food and royal jelly, the importance of the drone, races of bees, heredity, introduction of cells naturally by supersedure and in emergency. Also a thorough discussion of queen rearing. The latter part of the book is taken up with various methods of queen rearing, the establishment of nuclei and the mating of queens and queen introduction.

The book is to be recommended. The publisher is Miss I. Snelgrove, Bleadon, Weston-Super-Mare, England, and the price is 22 shillings, 8 pence postpaid.

We have secured a few copies for interested readers. The price will be $5.00 each postpaid in the United States.

## A Suggestion

Before our southern brethren begin shipping bees this spring, I would like to make a suggestion. I'm a big beekeeper—had two packages shipped to me from Mississippi last spring. I work not so far from the express office, so used to run over there after the late train from the South to see if my bees were in. A lot of these express men know less about bees than even I do. Most of them take it for granted that the cans they see in the package are to be in the bottom. I saw several packages going through which were placed that way. Packages bottom side up, sirup inaccessible and the poor bees starving.

You hard-working folks who ship us package bees—Why do you not have your address labels printed with a small place for the address and a very large place in bold type — CAUTION: THIS SIDE UP. And those sticks which I see on the sides of the package; I do not know myself whether they are handles to pick it up with or intended as a more substantial base to set it on.

Visit a big express office during shipping time and you will see what I mean.

Edwin A. Lewis,
Nebraska.

## New Irish Bee Magazine

There has just come into our hands Vol. 1, No. 1 of the "The Irish Bee-Keeper" which is the official organ of the Federation of Irish Beekeeping associations and has for its editor, Mr. P. E. Moriarty, The Laurels, Carrigrohane, Co. Cork, Ireland.

The subscription price of the magazine in the United States and Canada is $1.50 postpaid, while in Great Britain 6 shillings.

Since October, 1933, when the death of the Rev. J. G. Digges occurred, his bee magazine, The Irish Bee Journal was discontinued, and the Irish beekeepers have been served only by departments in the Farmers' Gazette and Sunday Independent.

The first issue of this new magazine naturally pays tribute to the Rev. Digges, whose reputation was world wide, and whose book, "The Prac-


NOW BOOKING ORDERS FOR PACKAGE BEES AND QUEENS FOR 1947

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Write for prices.

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Ship your honey to us, we pay the highest prices possible. Light or dark. One tin or a car load. WRITE us NOW.

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**Italian Queens and Bees**

We will have queens throughout the season, also small orders of packages.

| | |
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| 3-lb. pkgs. with queen | $5.00 |
| 2-lb. pkgs. with queen | 4.00 |
| Queens | 1.25 |

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**Italian Package Bees and Queens**

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**ROOT QUALITY BEE SUPPLIES**

GLASS AND TIN CONTAINERS
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**M. J. BECK CO.**

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**Quality 3-Banded Italian Queens and Package Bees**

WE SPECIALIZE IN PROMPT AND FULL WEIGHT SHIPMENTS

**WICHT APIARIES**

406 Miller Street : Hattiesburg, Miss.

## Better Bred Queens—3-Banded Italians

WE ARE BOOKED TO CAPACITY UNTIL MAY 15TH. WRITE US FOR PRICES AFTER THAT DATE.

**CALVERT APIARIES** — **Calvert, Alabama**

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**WE REGRET** HAVING TO TURN AWAY CUSTOMERS. Although we are again increasing our production we can make NO SACRIFICE of QUALITY and SERVICE for Quantity. Please send no more orders for package bees for 1947 deliveries. ITALIANS AND CAUCASIANS.

**WEAVER APIARIES, Navasota, Texas**

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## PLANT'S 3-BANDED ITALIANS

Our queens are rigidly culled and reared from only the highest producing, gentle stock. Packages are full weight, young bees in new, light weight cages. No disease has ever been found in any of our queen or package yards.

| | 1-24 | 25-99 | 100-up |
|---|---|---|---|
| 2-pound packages | $4.50 | $4.25 | $4.00 |
| 3-pound packages | 5.75 | 5.50 | 5.25 |

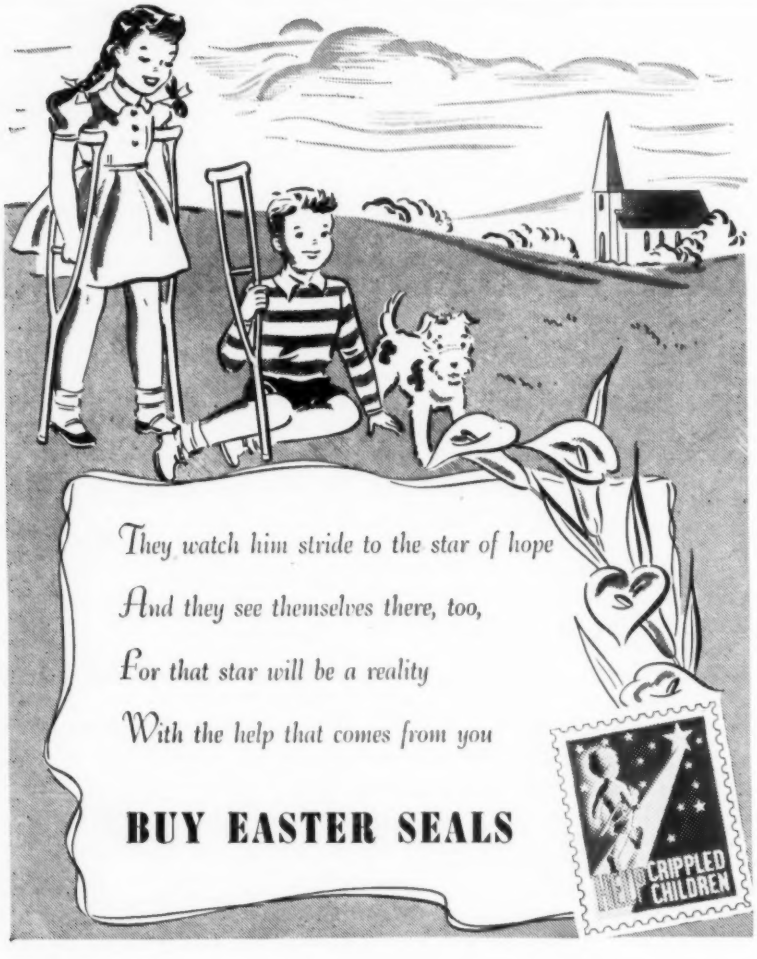
Queens, $1.25 each, any number

Above prices include young, laying queens and are F.O.B. shipping point. Queens postpaid.

$1.00 per package with order, balance 10 days or more prior to shipping date.

**W. E. PLANT : Rt. 2 : Hattiesburg, Miss.**

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FOR BETTER BEEKEEPING

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FIRST CHOICE OF EXPERT BEEKEEPERS

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## The John M. Davis Strain Italian Queens

BRED THE DAVIS WAY

Guaranteed to please.

Untested ..... $1.25 each
Tested ..... 2.00 each
After June 30th, $1.00 each.

Terms—Cash with order.

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## Dovetailing Tool

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COMPLETE WITH CUTTER AND INDEX.

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A time and labor saving device for making your own hive bodies and supers and replacing the broken side and ends of your old supers. Does a perfect job of dovetailing. Cheap to operate and reasonably priced. Details on request.

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## Package Bees For 1947

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1—Prompt, fast delivery.

2—Uniform top quality.

3—Fair prices.

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GRIDLEY, CALIFORNIA

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## *IT'S YOURS; USE IT!*

You can market your honey through your own Association and realize a neat profit. Results will surprise you. A crop successfully marketed is half the battle. Find out about your own cooperative. What it means to you now and in the future. Write or call for information.

*Illinois Honey Producers' Ass'n, Inc.*
MT. STERLING, ILLINOIS

tical Bee Guide" is found in practically all bee libraries.

The new magazine is an unpretentious book size magazine of 20 pages, but no more unpretentious than its editor who hopes that Irish beekeeping may be served through the agency of this magazine, and we have no doubt that their affiliated associations and editor himself will use every effort.

The first issue also contains notes on spring management, seasonal beekeeping in various parts of Ireland, editorials, and some notes on Acarine and other diseases.

We speak for our contemporary our whole-hearted appreciation of their problems and their efforts, and hope for them a very successful career.

## Natural Factors That Influence Beekeeping

(Continued from page 113)

enough bees sufficiently early in the season to make the most of the honeyflow.

As far as altitude seems to affect nectar secretion, it is apparent that most important honey-producing regions lie between thirty-five hundred and five thousand feet. Black sage, in southern California, is an example that extends to an elevation of five thousand feet, and the most dependable flow from sage is at the higher level. Also, nectar secretion is greater in the same species at high altitudes which may be due to the greater range between maximum and minimum daily temperatures or to a greater range in the humidity of the air.

The soil is one of the prime factors affecting a honeyflow. Often the amount of bloom of a plant does not indicate the abundance of nectar secretion, largely because of soil differences. Sometimes heavy bloom produces little nectar. Other times light bloom produces heavily. The soil in the cutover lands in Minnesota is very rich in lime, and clovers spring up everywhere they get a chance. Alsike often grows wild in the woods, along railroad embankments, and in every nook and corner. They bloom profusely and the air is laden with rich perfume. The combination of a north latitude and a rich lime soil produces a heavy nectar secretion which often mean a good honey year for the beekeeper.

Illinois.


ITALIAN QUEENS . . . BEES

Line bred since 1927. Queens raised from stock of 200 to 300 lbs. after pulling bees all spring until up into July. Queens mated to drones from similar selection. Also queens from resistant stock and mated in separate yard. Lots of open dates.

| | Queens | 2-Lb. | 3-Lb. | |
|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.65 | LARGER LOTS, WRITE |
| 25-50 | 1.30 | 4.25 | 5.45 | FOR PRICES |

We specialize in queens for large lots. Write for price on queens.

Homer W. Richard, Rt. 3, Box 252-A, El Dorado, Ark.



NEISES

HONEY CLARIFIERS & FILTERS

Improve the quality of your honey; save valuable time

For further information write to . . . . . THE NEISES CO.

P. O. BOX 249 - MARSHFIELD, WIS.

Italian Package Bees & Queens

FULL WEIGHT DELIVERY—BOOKING NOW—10% WITH ORDER. BALANCE 10 DAYS BEFORE SHIPPING BEES.

Eells Honey & Bee Co.
Houma, La.

| | |
|---|---|
| Queens | $1.25 |
| 2-lb. with queen | 4.00 |
| 3-lb. with queen | 5.00 |
| 4-lb. with queen | 6.00 |

Books About Bees

A LIVING FROM BEES by Frank C. Pellett. His new 1946 book for all beekeepers. Combining results of many years' experience with latest developments. 335 pages. Cloth $2.50.

BEEKEEPING FOR PROFIT AND PLEASURE by Addison Webb. A delightful descriptive view of the bee and her work. Large size. Cloth. 110 pages $2.00.

PRACTICAL QUEEN REARING by Frank C. Pellett. Revised 1946. All queen rearing practice instructing the novice and the beginner as well as the commercial producer. Cloth. 100 pages $1.00.

LIFE OF LANGSTROTH by Florence Naile. A complete biography of the inventor of the movable frame hive. Cloth bound, 215 pages $2.50.

AMERICAN BEE JOURNAL
Hamilton, Illinois

GRAPE FRUIT - ORANGES

RED BLUSH Grape Fruit $3.50 a bushel. Pink-meated, seedless, tree-ripened. Tree-ripened Oranges $4.00 a bushel.

MIXED BASKETS of Red Blush Grapefruit and Oranges at $3.25 a bushel. All F. O. B. Brownsville.

Exprers rates $1.34 to $2.58 a bushel, depending on your location.

Reference, Dadant & Sons, Hamilton, Illinois, who purchare my fruit.

Complete price list on request

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*Do you know about the*

LORD'S ACRE PLAN

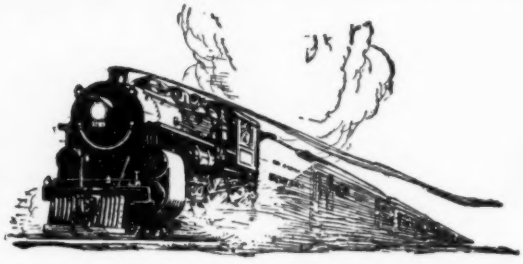
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# FAST SERVICE AND RESULTS



Our light colored Italian stock has been selected first, for prolificness; secondly, for high honey production; third, for gentleness; and fourth, for appearance. We will put a colony of these bees up against any for honey production. There are four express and mail trains per day for bees on quick notice. With each package bee shipment, we send 4 per cent extra queens to replace any possible loss when queens are needed at once.

| Lot | Queens | 2-Lb. | 3-Lb. | 4-Lb. | 5-Lb. |
|---|---|---|---|---|---|
| 1-5 | $1.55 | $4.75 | $6.00 | $7.25 | $8.50 |
| 5-15 | 1.50 | 4.65 | 5.90 | 7.15 | 8.40 |
| 15-25 | 1.40 | 4.50 | 5.75 | 7.00 | 8.25 |
| 25 up | 1.35 | 4.40 | 5.65 | 6.90 | 8.15 |

Above package prices include queen. Queenless packages, subtract $1.35 from price of package with queen. All queens are airmail, postpaid, but package bees are F. O. B. shipping point and are shipped express collect. It is preferable to ship package bees by Railway Express, however they can be mailed and in that event, customers should include postage.

Terms: Small orders, cash in full. Large orders, 20 per cent deposit, balance to be received two weeks before shipping date. U. S. funds. A 10 per cent discount is allowed on package bees if shipment is to be made after May 20th. A 20 per cent discount allowed on queens if shipment is to be made after May 20th and a 30 per cent discount is allowed on queens to be shipped after June 1st.

Write for Particulars.

**DANIELS APIARIES : Picayune, Miss.**



This picture was taken March 2, 1946 by Harry T. Starnes, Crawfordsville, Indiana. It shows the bees vigorously loading up on pollen substitute in an inverted telescoping cover.

# POLLEN SUBSTITUTE

It is so easy to feed dry pollen substitute. It takes less than a minute to mix 100 pounds of the soy with the yeast and then shovel it into boxes, pans or tubs and set it in front of the hives on warm, sunshiny days and watch the excitement.

Bees fed dry pollen substitute will build up faster and be in all around better shape. Figure five pounds per colony and a mixture of five parts soy to one of yeast.

Descriptive circular free and with each shipment.

| | | |
|---|---|---|
| 5 LB. BAG YEAST | $ 1.50 | FOB. Paducah |
| 25 LB. BAG YEAST | 6.00 | FOB. Paducah |
| 100 LB. BAG YEAST | 17.00 | FOB. Paducah |
| 25 LB. BAG SOY | $ 2.75 | FOB. Paducah |
| 100 LB. BAG SOY | 7.15 | FOB. Paducah |
| 500 LB. LOTS | @ 6.65 | FOB. Paducah |
| 2,000 LB. LOTS | @ 6.35 | FOB. Paducah |

QUICK SHIPMENT FROM OUR LARGE PADUCAH STOCK.

**WALTER T. KELLEY CO. : Box 210 : Paducah, Ky.**

## *Gooch's Italian Queens That Produce*

Bright Yellow and Three-Banded Italians, both are gentle and prolific. We do not breed from any queen that does not produce as much as 300 lbs. surplus honey.

| | Queens | 2-Lb. Bees and Queen | 3-Lb. Bees and Queen |
|---|---|---|---|
| 1 to 25 | $1.40 | $4.50 | $5.60 |
| 26 to 50 | 1.30 | 4.25 | 5.35 |

We furnish health certificate, get your order in early to assure you of choice shipping date.

JESSE E. GOOCH SONS : Rt. 3 : Pine Bluff, Ark

**WESTERN CANADA BEEKEEPER**

Subscription $1.00 per year, $1.50 two years, $2.00 three years. In combination with **American Bee Journal $2.25 per year.**

Timely topics on western Canadian beekeeping and all the news about Canada and Canadian markets. You cannot afford to be without the most up-to-date information in these days of great changes. Sample copy free. Address WESTERN CANADA BEEKEEPER, 501 Bank of Commerce Bldg., Winnipeg, Manitoba, Canada.

**A-B-J Ads Pay Dividends**



## Pellett Clover

New clover spreads rapidly from deep roots and increases from year to year. Blooms in June and July. Very attractive to bees. Root divisions may be planted in fall or spring. Root divisions—25, $2.00; 100, $5.00; 250, $10.00; 500, $18.00, postpaid. Shipping to May 10.

**MELVIN PELLETT**

ATLANTIC, IOWA

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*Shows the Way to Success . .*

Gives the latest news and views of the rabbit world—an illustrated monthly magazine of general and educational features. One year $1.00; three years, $2.00; sample 15c.

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Dept. S. Warrenton, Missouri

*A Brilliant New Book—*

# The Hive *and the* Honeybee

THE HIVE AND THE HONEY-BEE is a book of one hundred years of beekeeping lore brought completely up-to-date by the world's best authority on each subject. All the way through it is a step-by-step array of how-to-do-it facts that are brand new, facts that are rapidly changing beekeeping management—new short cuts in honey handling—new things to use through the season—new ideas in swarm control—new ways to winter bees—new facts about bee life. It helps to make a real living from bees and is a complete education in how bees live and work and how they look inside and outside.

CAN MAKE IMMEDIATE DELIVERY

PRICE $4.00 (With American Bee Journal one year $5.00)

SEND ORDERS NOW TO

**American Bee Journal**
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**ITALIAN Bees and Queens**

| | Queens | 2-Lb. | 3-Lb. | 4-Lb. |
|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.85 | $7.20 |
| 25-99 | 1.30 | 4.25 | 5.55 | 6.85 |
| 100 up | 1.20 | 4.00 | 5.25 | 6.50 |

Shipping point Epes, Alabama

**LITTLE BROS. : Sumterville, Ala.**

## Gaspard's Quality Italian Queens and Package Bees

We are now booking orders for Spring 1947 delivery. Only 20% with order, balance 10 days before shipping time. We guarantee live arrival. Health certificate accompanies each shipment. Prices as follows:

| | | |
|---|---|---|
| 2-lb. package with queen | 1-49, $4.25 | 50-up, $4.00 |
| 3-lb. package with queen | 1-49, 5.25 | 50-up, 5.00 |
| 4-lb. packages with queen | 1-49, 6.25 | 50-up, 6.00 |
| 5-lb. package with queen | 1-49, 7.25 | 50-up, 7.00 |

Queens $1.25 each

**J. H. GASPARD : HESSMER, LA.**

# Bessonet's Italians

We are sold out on March queens and packages and are unable to accept more April orders until further notice. Booking queen and package orders for delivery after May 15th.

**BESSONET BEE COMPANY : Donaldsonville, La.**

## Leather Italian Queens and Package Bees

For good results place your requirements with us now; many desirable dates still open. In our 10 years of queen breeding we have developed a gentle but hardy Italian strain.

PRICES FROM LATTER MARCH TO JUNE 1ST, 1947

| | Queen | 2-Lb. | 3-Lb. | 5-Lb. |
|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.85 | $8.55 |
| 25-99 | 1.30 | 4.25 | 5.55 | 8.15 |
| 100-up | 1.20 | 4.00 | 5.25 | 7.75 |

**Evangeline Bee Co. : Breaux Bridge, La.**

## ITALIAN PACKAGE BEES AND QUEENS
### ALSO D. R. QUEENS

ACCEPTING ORDERS FOR MAY AND LATER SHIPPING, BOOKED FULL FOR APRIL. PRICES IN U. S. FUNDS.

| Lots of | Queens | 2-Lb. | 3-Lb. |
|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.75 |
| 25-99 | 1.30 | 4.25 | 5.50 |
| 100-up | 1.20 | 4.00 | 5.25 |

For queenless packages, deduct price of queen.

**HOMAN BROS. : Rt. 2 : SHANNON, MISS.**

**POLLEN SUBSTITUTES**

| | 1-Lb. | 5-Lb. | 10-Lb. | 25-Lb. |
|---|---|---|---|---|
| Brewer's yeast and soy flour expeller mixed 1 to 6 | | $ .75 | $1.50 | $3.25 |
| Brewer's yeast | .40 | 1.50 | 2.75 | 5.50 |
| Soy flour | | | 1.40 | 2.75 |

Write for prices in larger quantities. Include postage if you wish it by parcel post. Allow 2 pounds for packaging.

All prices collect, Bainbridge, N. Y. **M. Y. S. COMPANY, Bainbridge, N. Y.**

*A-B-J Ads Are Result Getters*

# Puett's Packages

Space for early shipments is now almost entirely booked. Rush orders in for earlier than May shipment. Demand is enormous. Don't be left out by waiting too late.

*Send $1.00 per package deposit to hold shipping date.*

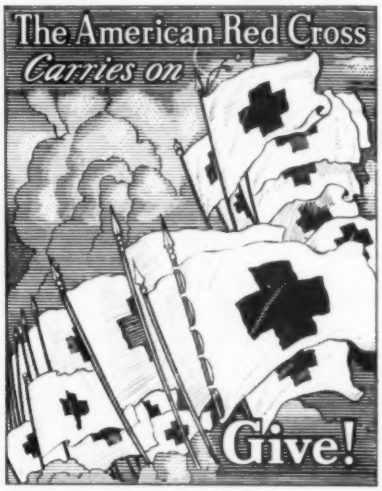
**PACKAGE BEES WITH QUEENS**

| Quantity | 2-lb. | 3-lb. | 4-lb. |
|---|---|---|---|
| 1 to 9 | $4.50 | $5.65 | $6.80 |
| 12 to 48 | 4.25 | 5.40 | 6.55 |
| 51 to 99 | 4.15 | 5.30 | 6.45 |
| Above | 4.00 | 5.15 | 6.30 |

**For loose-queen type add $1.00 per package. For queenless packages deduct $1.25**

**PUETT COMPANY**
**HAHIRA, GEORGIA**

**Leather Colored Italians**
**QUEENS ONLY**
For spring delivery. We are sold out of package bees for the coming year.
**Gold Flat Apiaries**
NEVADA CITY, CALIFORNIA




**THRIFTY QUEENS**
Complete Packages and Queens—1947 Delivery. Write for prices and open dates. Remember, Thrifty bees are guaranteed to please.
**W. J. FOREHAND & SONS**
FORT DEPOSIT, ALA.
Breeders since 1892.

**BEE SUPPLIES**
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REEDSVILLE, WISCONSIN
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**"By following** this regular Bond saving plan of my own—I feel that I'm doing a many-sided job. I have a growing backlog for future farm improvements . . . for the children's college schooling . . . and for my own later years."

**"And, in addition** to these direct personal benefits . . . it's good to feel that my regular buying of U. S. Savings Bonds helps keep America strong . . . Neighbor, isn't this a plan worth considering for yourself?"

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**DUAX APIARIES**
**Package Bees & Queens**

2-LB. PACKAGE WITH QUEEN $4.25
3-LB. PACKAGE WITH QUEEN 5.25
QUEENS, EACH 1.35

10% of price books your order.

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GROVELAND, FLORIDA

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America's oldest magazine devoted exclusively to milk goats. Broadest circulation—goes to every state and eighteen foreign countries. Articles by best authorities. Edited by practical goat breeders. Subscription: $2.00 per year in U. S. and Canada; 3 years for $5.00. Sample copy 20c.
**THE GOAT WORLD**
P. O. Box 1530, Portland 7, Oregon

## Package Bees For 1947

2-lb. package with queen $4.00 each
3-lb. package with queen 5.00 each
4-lb. package with queen 6.00 each
Queenless package, deduct $1.00 from above price. 20% down books order.

**HESSMER BEE FARM**
HESSMER, LOUISIANA

## Gentle Northern Queens

FROM TESTED 3-BANDED ITALIAN BREEDING STOCK

This hardy improved strain of bees is being reared under natural conditions here in the north.

Prices June 1st to October 20th

| | |
|---|---|
| Untested queens (each) | $1.35 |
| Tested queens, in large cages (each) | 2.25 |
| Export queens (each) | 4.75 |

We ship Airmail Postpaid.

20% in U. S. funds will book order, balance before shipment is made. Prompt service and satisfaction.

•

**BARGER APIARIES**
CAREY, OHIO

AUSTRALIAN BEEKEEPING NEWS
The Leading Bee Journal of the Southern Hemisphere is the
**AUSTRALASIAN BEEKEEPER**
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**ITALIAN BEES AND QUEENS**
Now booking orders for April and May shipments of package bees.

| Lots of | 2-Lb. | 3-Lb. | |
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| 1-24 | $4.50 | $5.85 | With young |
| 25-99 | 4.25 | 5.55 | laying queens |
| 100-up | 4.00 | 5.25 | Express collect |

Live and safe delivery guaranteed.
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## ITALIAN BEES

Package Bees with Queen. 2-lb. pkgs. with queen $4.00; 3-lb. pkg. with queen $5.00; 4-lb. pkg. with queen $6.00. Satisfaction guaranteed. 20% down to book the order.

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# York's Package Bees & Queens

## QUALITY BRED ITALIANS

Booked full until middle of May, accepting orders for shipping after May 15th, and later. Rush orders now before all dates are filled.

PACKAGE BEES WITH QUEEN

| Quantity | 1 to 2 | 3 to 27 | 30 to 99 | 102-up |
|---|---|---|---|---|
| 2-lb. pkgs. | $4.50 each | $4.35 each | $4.20 each | $4.00 each |
| 3-lb. pkgs. | 5.50 each | 5.35 each | 5.20 each | 5.00 each |
| Extra Queens | 1.50 each | 1.45 each | 1.40 each | 1.35 each |

Queenless packages, deduct $1.15 per package.

Extra queens ordered separate by mail and package bees by express only. We recommend 3-lb. size package as best all around size. If convenient, small orders cash, larger orders $1.00 deposit per package to insure order, and the balance not less than two weeks prior to shipping date.

## York Bee Company : Jesup, Ga., U.S.A.

*(The Universal Apiaries)*

## DIXIELAND'S Leather-Colored ITALIANS
## Package Bees and Queens

FOR MAY AND JUNE DELIVERY. UNABLE TO SUPPLY UNTIL MAY 15TH.

| | Queens | 2-lb. Pkgs. | 3-lb. Pkgs. | 4-lb. Pkgs. |
|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.85 | $7.20 |
| 25-99 | 1.30 | 4.25 | 5.55 | 6.85 |
| 100-up | 1.20 | 4.00 | 5.25 | 6.50 |
| PRICES AFTER JUNE 1ST | | | | |
| 1-24 | $1.10 | $4.20 | $5.55 | $6.90 |
| 25-99 | 1.00 | 3.95 | 5.25 | 6.55 |
| 100-up | .90 | 3.70 | 4.95 | 6.20 |

**DIXIELAND APIARIES : : GREENVILLE, ALABAMA**

## SOYBEAN FLOUR—Expeller Process

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| 100 pound bag, f. o. b. mill, Decatur | $7.15 |
| 500 pounds or more, f. o. b. mill, Decatur—per hundred | 6.65 |
| 2000 pounds or more f. o. b. mill, Decatur—per hundred | 6.35 |
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Cash with order—Instructions for mixing with all orders

Shellabarger Soybean Mills : Decatur 30, Ill.

## Packages SUNKIST ITALIAN Queens

We expect to have March queens and packages. Send us you inquiries. We can accept limited additional orders in April and May.
Live delivery—health certificate—Young mated queens and bees. Price:

| | 1-25 | 25-Up |
|---|---|---|
| 2-lb. with queen | $4.25 | $4.00 |
| 3-lb. with queen | 5.25 | 5.00 |
| Queen | 1.25 | 1.15 |

**SUNKIST BEE CO. : CONVENT, LA.**

**ITALIAN PACKAGE BEES AND QUEENS**
On the Same Old Basis — QUALITY, SERVICE, SATISFACTION

| | |
|---|---|
| 2-lb. bees with queen | $3.85 |
| 3-lb. bees with queen | 4.85 |
| 4-lb. bees with queen | 5.85 |

**E. J. BORDELON APIARIES : Box 33, Moreauville, La.**

# Crop and Market Report



M. G. is an inquisitive fellow!

For our March Crop and Market Report we asked reporters to answer the following questions:

1. Condition of bees so far?
2. Moisture conditions?
3. General prospects?
4. Is honey demand holding up?

### Condition of Bees

Throughout the entire United States, without exception, bees apparently came through the winter in good condition. However, most reports show a shortage of stores at this time or that there will probably be a shortage of stores as the spring advances. This condition prevails throughout the entire country, although most of the commercial beekeepers seemingly have been forearmed by leaving plenty of honey, either by crowding the bees or leaving a full-depth super with ample stores.

The winter does not seem to have been oversevere and there have been occasional flights. In fact a good flight came in the northern sections after the heavy snows and blizzard of a few weeks ago. The heavy freeze in the southeastern section, when bees were beginning to breed, may make them run extremely short.

In California, where the crop will soon be coming on, the bees seem to be in normal condition in the southern section; probably light but with enough stores in the central section; and almost normal in the northern section, but perhaps will be held back considerably by heavy foggy weather.

### Moisture Conditions

The only sections reporting that moisture conditions may not be satisfactory are northern Florida, where it has been exceptionally dry; southern Wyoming; the section around Billings, Montana; parts of Colorado, where snow has not been sufficient the western part of Oklahoma; and the western part of Texas. In California there were heavy rains in December, but very little rain since, particularly in the south and central part, and probably conditions there are subnormal, although subsoil moisture is better than a year ago. Sections in northern California report the moisture as being only two-thirds of normal, more rain being needed to give a prosperous season.

Considering the country as a whole, we can report that rains and snows have been copious and moisture conditions look quite ample, even in the mountains, there being only a few sections which still are short on snow.

### Prospects

At this time the prospects for a honey crop throughout the country seem to be fair to good, although it is early to judge. The late freezes in the Southeast did great damage to the early blooming plants. The early bloom of pennyroyal and orange was in many cases destroyed and titi has evidently been badly hurt. Just what effect the freeze will have on the later bloom remains to be found out. In the New England states conditions are satisfactory and throughout the Central West we might say they are fair to good, with no appreciable increase in the number of honey plants over last year. The Dutch white clover prospects in this section are satisfactory and also some sweet clover is coming back.

On the whole, the situation apparently is one of fairly good prospects, notwithstanding the absence of those great alluring fields of sweet clover which we knew of a few years ago. The man who stayed in the irrigated sections, rather than moving to more alluring fields, evidently is in good fortune now as there are still some sections where sweet clover seems to be in sufficient quantity to warrant planning on a full crop. However, there are reports of weed killing and other plowing up of sweet clover acreages which are apt to cut down on the forage. Also overstocking is mentioned in a number of reports from the irrigated sections.

Altogether, prospects for the bees and for a honey crop are as good as they were a year ago.

### Is Honey Demand Holding Up?

All reports show that practically all honey has been sold, and at excellent prices. Wherever there is honey left on hand apparently there has been somewhat of a buyer's reaction to the extremely high prices, although high prices are still maintained in many instances. There seems to be no doubt that the balance of the present crop will move, since practically all of it is already out of the hands of the producer. However, the tag end of the crop may have to be sold at a figure somewhat reduced from the exorbitant prices we read and heard of two months ago.

Prices for the new crop no doubt will be due for a readjustment, although no one looks for prices to be back to the old ceiling prices of 12 cents with a commensurate price on retail packages.

Some Argentine and Mexican honeys are being offered on a basis of approximately 20 to 25 cents a pound, f.o.b. importation point, and apparently are being picked up on the 20-cent basis.

**HONEY WANTED** Cars and less than cars Top Prices
C. W. AEPPLER CO., Oconomowoc, Wisconsin

## Another Bee Book

Louis Sutherland, popular writer and author of "The Book of the Stars," has a new book entitled, "The Life of the Queen Bee."

The book is cloth bound, well illustrated, and has 125 pages. It is published by the Beechhurst Press of New York and its price is $2.50.

While the title would infer that the book is written about the queen, much of the book must of necessity deal with the inmates of the hive itself, the workers, and the drones, as well as the queen.

While some privileges may have been taken, for instance, in ascribing to the colony a production of 500 pounds of honey each year and the ability of the queen to lay 3,000 eggs daily, on the whole the statements are quite accurate, and the book makes up in interesting style what it might lack in some other particulars.

# Babcock Honey Co.

In combination with our wooden bee supplies, we offer practically all sizes of

# Dadant's Foundation

for early shipment as listed below.







| No. | PRICES |
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| **3100** | Thin Surplus for 4¼" square sections. 28 sheets per lb. |
| **3101** | Thin Surplus for 4"x5" sections. 34 sheets per lb. |
| **3102** | Thin Surplus for 4¼"x4¼" split sections. 25 sheets per lb. |
| **3108** | Thin Surplus for 4"x5" split sections. 22 sheets per lb. |
| **3103** | Thin Surplus for 5⅜" shallow frames with solid bottombars. 24 sheets per lb. |
| **3104** | Thin Surplus for M. D. frames with solid bottom-bars. 22 sheets per lb. (Price on all Thin Surplus **$1.25** per lb.; **$5.95** per 5 lbs.; **$29.25** per 25 lbs.) |
| **3105** | Bulk Comb 4½"x16½". 20 sheets per lb. |
| **3106** | Bulk Comb 5"x16½". 18 sheets per lb. (Price on all Bulk Comb **$5.75** per 5 lbs.; **$28.50** per 25 lbs.) |
| **350** | Crimp-Wired Medium Brood, 8½"x16¾", for Hoffman Frames. 10 sheets, **$1.70**; 50 sheets **$8.10**; 25 lbs., **$27.75**; 7 sheets per lb. |
| **351** | Crimp-Wired Medium Brood, 10 11/16"x16¾", for M. D. or Quinby Frames. 11 sheets, **$2.65**; 55 sheets, **$12.45**; 25 lbs., **$27.75**; 5 sheets per lb. |
| **352** | Crimp-Wired Medium Brood, 4 13/16"x16¾", for 5⅜" shallow frames. 10 sheets, **$1.10**; 50 sheets, **$4.85**; 25 lbs., **$28.50**; 12 sheets, per lb. |
| **353** | Crimp-Wired Medium Brood, 5 11/16"x16¾", for M. D. shallow frames. 11 sheets, **$1.35**; 55 sheets, **$5.85**; 25 lbs., **$28.50**; 11 sheets per lb. |
| **380** | Plain Medium Brood, 8"x16¾", for Hoffman Frames. 10 sheets, **$1.45**; 50 sheets, **$6.85**; 25 lbs., **$26.95**; 8 sheets per lb. |
| **381** | Plain Medium Brood, 10"x16¾", for M. D. or Quinby Frames. 10 sheets, **$1.95**; 25 lbs., **$26.95**; 6 sheets per lb. |
| **382** | Plain Medium Brood, 4½"x16¾", for 5⅜" Shallow Frames. 10 sheets, **88c**; 50 sheets, **$3.95**; 25 lbs., **$27.50**; 15 sheets per lb. |

# BABCOCK HONEY CO.

## 803 Sumter Street : Columbia, S. C.

# Classified Advertisements

## BEES AND QUEENS

GOLDEN ITALIAN QUEENS—The best of quality. Untested queens $1.25 each; tested $2.50 each. Satisfaction guaranteed. Carolina Bee Farm, Graham, N. C.

BREWER'S LINE-BRED CAUCASIAN QUEENS—We are booked solid until June 1st. Queens after this date $1.25 each. No package bees. Brewer Brothers Apiaries, 3217 Hawthorne Road, Tampa 6, Florida.

JOE'S ITALIAN BEES AND QUEENS for delivery after May 15th. 3-lbs. with queen $4.90; 4-lbs. with queen $5.75; queenless packages, deduct $1.00. Satisfaction guaranteed. Joe Roy Apiaries, Hessmer, La.

THREE-BANDED ITALIANS Certified. Queens—1-24, $1.40; 25-99, $1.30; 100-up $1.20. Packages with queens—2-lbs., 1-24, $4.50; 25-99, $4.25; 100-up, $4.00. 3-lb., $5.85, $5.55 and $5.25 respectively. Shipping commences April 1st. Cottage Hill Apiaries, Rt. 2 Mobile, Alabama.

THREE-BANDED ITALIAN Queens and Bees—Delivery for May 1947. Terms—10% of order holds shipping date. Balance before shipment. Prices—3-lb. pkg. with queen, 1 to 9, each $5.65; 12 to 49, each $5.40; 51 to 99, each $5.30; 100 and above, each $5.15. Extra queens, $1.25 each, any quantity. Jas. H. Hacker & Sons, Fitzgerald, Georgia.

ITALIAN AND CAUCASIAN Queens $1.40 each. Sorry, no more packages for 1947 delivery. John M. Brose, P. O. Box 36, Felton, California.

TESTED FALL ITALIAN Queens ready for shipment March 15th to April. $1.25 each. Limited supply. Order now. Evans Bros., Durham, California.

PACKAGE BEES with queen introduced. I am again producing packages with this extra service. Can accept a few more orders. A. O. Smith, Mt. Vernon, Indiana.

NO RAISE IN PRICES—3-lb. pkg. with queen $5.00. Delivery during April. J. E. Wing & Sons, Knights Landing, California.

FOR SALE—Gentle certified Italian bees. Three pound package with queen $4.50, less queen $3.50, net f.o.b. after May 15th. Fancy tupelo gallberry chunk comb honey, six five-pound square glass jars to case, ready June 1st. A. V. Dowling, Valdosta, Georgia.

GREEN'S PROFIT-PRODUCING QUEENS will please you as they have pleased hundreds of others. Famous the country over. Where could you do better? The best Italians. Price $1.25 each. D. P. Green, Rt. 2, Deland, Florida.

BOOKING ORDERS for May delivery—Carniolan and Caucasian package bees. 2-lb. pkg. $5.00; 3-lb. pkg. $6.00. Untested queens $1.40 each. Tillery Brothers, Greenville, Ala.

FOR SALE—2,000 4-frame nuclei. Available to truckers only. Price $7.00 each. Write for particulars. Eugene Walker, Gridley, California.

THANKS for 1946's business. Booking 1947 queens at 1946 prices. Lange Apiaries, Llano, Texas.

PACKAGE BEES, QUEENS, Italians. Circular free. Crenshaw County Apiaries, Rutledge, Alabama.

## HONEY AND BEESWAX WANTED

WANTED—Clover extracted and comb honey. Any quantity. State price in first letter. C. Jankowski, Prairie View, Illinois.

WANTED—Your honey, any amount. Will give top prevailing prices. Herald Partello, Rt. 2, Boone, Iowa.

WANTED—Light extracted honey in 60's clover preferred. J. Jones, 115 West 82 Street, New York 24, N. Y.

HONEY AND BEESWAX. HIGHEST PRICES PAID. MAIL SAMPLES, ADVISE QUANTITY. BRYANT AND SAWYER, LOS ANGELES, CALIFORNIA.

HIGHEST CASH PRICES paid for all grades extracted honey. Prairie View Honey Co., 12303—12th St., Detroit 6, Mich.

HONEY WANTED—Top prices paid. Write immediately. J. Wolosevich, 6315 So. Damen Ave., Chicago, Illinois.

WANTED—Extracted clover honey in 60's. B. I. Evans, Windom, Minnesota.

CLOVER HONEY WANTED in 60's. Large or small lots. Send sample and state quantity. Ellsworth A. Meineke, Arlington Heights, Illinois.

HONEY WANTED—All grades, carloads or less. Also beeswax. Pay top prices. H. & S. Honey & Wax Company, Inc., 265-267 Greenwich St., New York 7, N. Y.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 1360 Produce Street, Los Angeles, California.

WANTED—Extracted honey, white or light amber, in 60's. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois.

HONEY WANTED—Small or large lots. Send sample and amount. Rocke Apiaries, Eureka, Illinois.

## SUPPLIES

WESTERN PINE, Hoffman style brood and extracting frames. Split or solid bottom bars. Immediate shipment. $7.50 per hundred. John Musgrove, 611 West Main, Mesa, Arizona.

SUPER WIRE EMBEDDER—Only workable wire imbedder on the market. $11.50 plus postage. Russell Easton, Rt. No. 3, Binghampton, N. Y.

ARMY SURPLUS tulle veils. Ideal for apiarists. 30c each postpaid. Dillard Thurman, Frederick, Oklahoma.

FOR SALE—25,000 mill run Lewis sections 3⅝x5x1⅞ scalloped 4 sides ⅛ inch at $14.00 per thousand, f.o.b. Hamilton, Illinois. Dadant & Sons, Hamilton, Illinois.

HIVE BODIES, covers and bottom boards, bee shipping cages and nuclei hives. All supplies new and knocked down. Price list furnished on request. A & B Supply Company, Coffee Springs, Alabama.

YOUR WAX WORKED into high quality medium brood foundation, 22 cents per pound; 100 pounds, $18.00. Fred Peterson, Alden, Iowa.

SIMPLEX TRAP clips queens without handling. $1.75 postpaid. INSTANT FRAME SPACERS—seven, eight, nine, fast-accurate. $1.50 postpaid. Free circulars, George Leys, 48 Drake Avenue, New Rochelle 2, New York.

BUY YOUR SPRING POLLEN SUBSTITUTE REQUIREMENTS NOW. We have hard to get Dried Brewers' Yeast at 35c per lb., 100-lb. bags, $23.50. Soybean Flour, 15c per lb., 100-lb. bags, $8.95. F. O. B. Minneapolis. Free instructions for using included with your order. HONEY SALES COMPANY, 1806-08 No. Washington Ave., Minneapolis 11, Minnesota.

ATTENTION BEEKEEPERS IN MINNESOTA, Wisconsin, Iowa, N. D. and S. D. Buy Lewis-Dadant Bee Supplies and Honey Containers in Minneapolis and save. Send for price lists. TOP PRICES PAID FOR HONEY AND BEESWAX IN CASH OR TRADE. HONEY SALES COMPANY, 1806-08 No. Washington Ave., Minneapolis 11, Minnesota.

PORTER BEE ESCAPES are fast, reliable, labor savers. R. & E. C. Porter, Lewistown, Illinois.

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries. Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

## FOR SALE

ONE THOUSAND COLONIES in ten frame hives, in Wyoming. Queen excluder and three shallow supers with each hive. Address WYOMING, care of American Bee Journal.

HONEY LABELS—Improved designs, embodying color, balance, simplicity and distinction. Please send for free samples and prices. C. W. Aeppler Company, Oconomowoc, Wisconsin.

FOR SALE—150 two and three pound shipping cages for package bees. To highest bidder. Herald Partello, Rt. 2, Boone, Iowa.

FOR SALE—300 extracting supers, 6 combs each, $2.50; or 9 combs without supers, $2.00. Disease free. All sales must be concluded at our headquarters. Darst-Birdsall, 541 W. 11th St., Corona, California.

90 DADANT comb honey supers, well painted. Write for particulars. Earl D. Dohse, Gordon, Nebraska.

FOR SALE in May—500 9-frame hives of bees, telescope metal covers, and 500 4-frame nucs, two to hive. Young queens. Health certificate. Can deliver by States Apiaries at Columbia, California. Herbert J. States, Saratoga, Wyoming.

GOOD USED 8-frame supplies. Sueper Apiaries, Webster City, Iowa.

FOR SALE—150 eight and ten frame beehives; 300 eight and ten supers; 100 queen excluders. Geo. C. Rubis, Spencer, Iowa.

LARGE CLOVER SEED FARM with 100 colonies bees in Northern Michigan for rent on shares. Long contract. Hustler having own tractor and combine preferred. D. A. Davis, 16582 Archdale, Detroit 27, Michigan.

200 10-fr. supers, 5⅝ inch deep, equipped for comb honey. 250 10-fr. hive bees with super $17.00. Equipment for 500. Or will sell complete outfit, including home and two or more acres land at Blackfoot, Idaho. Cozy Nook Honey Co., 3773 Moore St., Venice, California.

FOR SALE—400 colonies bees and equipment. Sufficient extracting supers to run same. With or without honey house. Kalona Honey Co., Kalona, Iowa.

FOR SALE—Approximately 200 colonies bees in 2 and 3 story hives and lots of extra equipment, 45 fr. extractor and other extracting equipment. Colonies have lots of stores for spring divisions. One acre of ground in small fruit. Also honey house. Sell all the above for $4,500.00. Located in best honey producing section of Missouri. Will sell separately 1200 comb honey supers, 8 and 10 fr. Frank King & Son, 326 South Bales Ave., Kansas City 1, Missouri.

## WANTED

WANTED—Good Brand Senior capping melter. E. E. Salge, Weslaco, Texas.

WANTED to operate on shares—500-1000 colonies located in the Mid-west. Give details in first letter. Address Box 20, care American Bee Journal.

WANTED—300 Modified Dadant shallow extracting supers in good condition. Jack Bradford, Fairfield, Montana.

WANTED—100 or more West cell protectors, good condition. Loyd Barnett, Gardner, Colorado.

BEES AND EQUIPMENT WANTED—Write full description and price. Would consider operating bees on shares. Seth Fox, Pewaukee, Wisconsin.

WANTED—Good small extractor for Hoffman frames. Basket and reversing type preferred. Chas. Pyle, Rt. 4, Paris, Illinois.

WANTED—100 or 200 colonies bees located in California. H. A. Sundean, Rt. 4, Box 125, Santa Cruz, California.

WANTED—Jumbo hive bodies with or without frames, any number up to 50, new or used. Hans Lippire, 1823 N. 18 St., Omaha, Nebraska.

WANTED—Will pay cash for bees and equipment in New York State. Send details and price. Howland Apiaries, Berkshire, N. Y.

BEES AND EQUIPMENT WANTED in southern states or Nebraska. Irvin Klaasen, Whitewater, Kansas.

WANTED—Electric extractor 20 to 45 frame. State size, condition and price first letter. Charles Mishler, Box 1124, Eugene, Oregon

## POSITIONS AND HELP WANTED

WANTED—Helper for my Minnesota apiaries State age, experience, and wages expected E. E. Salge, Weslaco, Texas.

I have an opportunity and future for capable young beekeeper. M. P. Traphagen Hunter, N. Y.

WANTED—Single man between twenty and thirty-five years of age. Well experienced with bees and producing honey. Very high wages, including board and room. Rex Schlemmer, Edgar, Montana.

**WANTED—Experienced and inexperienced help for package and queen business. Opportunity for permanent position. Full particulars in first letter, please. Box 99, Care of American Bee Journal.**

WANTED—Experienced helper in Montana apiary. Give references and age, etc., in application. Wages $200. Dr. Clark, Newell, South Dakota.

WANTED—A sober, steady man to work in my apiaries and on the farm for 1947. Particulars asked and answered in first letters. Married man with some experience who might be interested in purchase or rental by 1948. The Hawkeye Apiaries, Smithland, Iowa.

HELP WANTED—Man to work with bees coming season. Give reference, wages wanted with board and room furnished, qualifications, etc. J. B. & C. J. Merwin, Prattsville, N. Y.

WANTED—Housekeeper with beekeeping experience by beekeeper. Box 17, care American Bee Journal.

WANTED—Experienced queen and package beemen for our apiaries. Only honest, reliable men considered, no boozers. Give full information age, experience and salary expected in first letter. Good opportunity for right parties. YORK BEE COMPANY, JESUP, GEORGIA.

GOOD OPPORTUNITY for first-class beeman in a modern California apiary. Able to assist in managing 1500 colony outfit in honey and package bee production. House furnished. State qualifications and wages expected. Also need two experienced or inexperienced helpers. Write Box AC, care American Bee Journal.

## SEEDS AND TREES

BORAGE SEED, $5 pound; Catnip, $7; Horehound, $9; Garden sage, $10; Thyme, $1.75 ounce. All vegetable, flower, herb seeds by the ounce or pound. Robert Mead, White River Jct., Vermont.

ONE PACKET each of fifteen good honey plants for $2.00, postpaid. Illustrated circular free. Melvin Pellett, Atlantic, Iowa.

TRY the new Pellett Clover. Good honey plant. Spreads by underground root system. Root divisions, 25 for $2.00; 100, $5.00; 250, $10.00; 500, $18.00, Postpaid. Melvin Pellett, Atlantic, Iowa.

RAISE your own trees and shrubs from seed for shade and windbreak. Write for prices and information. Woodlot Seed Co., Norway, Michigan.

FOR SALE—BASSWOOD TREES, foot to ten foot tall. Write for circular on nectar and pollen producing shrubs, trees and perennials. Plant for permanent nectar and pollen during the lull of early spring and fall, when your bees need it the most. Nicollet County Nursery, St. Peter, Minn.

ANISE-HYSSOF SEED. Packet 25c; ½ ounce $1.10. James Beecken, Elgin, Illinois, Rt. 1, Bx. 275.

**ANISE-HYSSOP seed—packet 25c; ¼ ounce $1.10. (1 lb., $32.00, should plant one acre). Write for our circular on nectar and pollen producing shrubs, trees and perennials. Nicollet County Nursery, St. Peter, Minn.**

## MISCELLANEOUS

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information on range sheep than any magazine published. Subscription $1.50. Hotel Cactus, San Angelo, Texas.

THE BEE WORLD—The leading bee journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy, post free, 12 cents, stamps. Membership of the Club, including subscription to the paper 10/6. The Appis Club, The Way's End, Foxton, England.

NO MORE back copies wanted. We have been flooded with back copies as requested in last issue. Please send no more. American Bee Journal, Hamilton, Illinois.

INDIAN BEE JOURNAL—The only Bee Journal of India. Sample copy against 25 cents (or 1s 6d.) postage stamps. Yearly 7s. 6d. ($1.50) international M. O. Apply—Bhupen Apiaries (Himalayas), Ramgarh, Dist. Nainital, U. P., India.

FRENCH Beekeeper's Union wants to receive imported packages of Italo-American, Caucasian and Carniolan queen bees—delivering from the beginning of April, 1947. For offers, please write by air mail to M. A. Prodhomme, Bazouges La Perouse—Ille et Vilaine, France.

PEAFOWLS, ornamental birds, eggs. Shipped all over U. S. Rearing instructions $1.50. New practical bee veil worn with or without hat, prepaid $1.50; worth five. Customer references gladly supplied. Paul Spencer, 3827 Finley Avenue, Santa Rosa, California.

GUMMED LABELS—Up to 20 words, 500, 40c; 1000, 75c. Shipping labels, 500, $1.50; 1000, $2.50. Rubber stamp, 65c. 100 envelopes printed, 65c. Also new Champion cameras. Bargains. Circular. Brooks, B120B.J., Arkansaw, Wisconsin.

WHAT EVERY BEEKEEPER SHOULD KNOW! Beekeeping can be profitable. Read the book that tells you how—"Scientific Beekeeping" by Sechrist & McFarland. Get your copy of this vaulable and informing book NOW. Only $1.00 postpaid! 3c stamp brings Soilservice Library literature. SOILSERVICE LIBRARY, P. O. Box 131, Townsend, Mass.


**Northern California Package Bees**

**Queens—Italians Only**

COMPLETELY BOOKED WITH PACKAGE ORDERS FOR 1947. WE STILL HAVE PLENTY OF QUEENS, EACH $1.35.

**HOMER E. PARK**
PALO CEDRO, SHASTA CO., CALIF.

**HONEY WANTED**
Carloads and less than carloads. Mail sample and best prices in all grades.
**C. W. AEPPLER COMPANY**
Oconomowoc, Wisconsin

**McCORD FRAME-GRIP**
Patent Pending



A light weight, handy instrument used for loosening and removing frames from the hive with one hand.
Price $2.50, plus 15c postage fee. Shipping weight 12 oz. Satisfactory discounts for dealers.
McCORD MFG. CO.
RT. 2, BOX 866, SAN JOSE, CALIFORNIA

**Bennett's Italian Bees**

We still have some good shipping dates open. Each order large or small given careful and prompt attention.

| | 1-24 | 25-99 | 100-up |
|---|---|---|---|
| 2-lb. pkg. | $4.50 | $4.25 | $4.00 |
| 3-lb. pkg. | 5.75 | 5.55 | 5.25 |

Queens $1.35, any number.

**BENNETT BEE FARMS**
HATTIESBURG, MISSISSIPPI

**HONEY LABELS**
Improved designs, embodying color, balance, simplicity, and distinction. Please send for free samples & prices.
**C. W. AEPPLER COMPANY**
Oconomowoc, Wisconsin

**KOEHNEN'S**
**Package Bees and Queens**
For Quality and Service
**KOEHNEN'S APIARIES**
GLENN, CALIFORNIA


*Read the Classified Ads*

# ITALIANS
## PACKAGE BEES & QUEENS

Few open shipping dates left for April, but lots of open dates for May. We use only the large mating boxes with lots of honey and bees. This insures full-developed, large, vigorous queens, which are bred and hardened to all types of weather. All this you must have to reach the highest peak of production. Your crop depends upon your QUEEN. Our prices are very reasonable considering stock and service given.

| | Queens | 2-Lb. | 3-Lb. | 4-Lb. | 5-Lb. |
|---|---|---|---|---|---|
| 1-24 | $1.40 | $4.50 | $5.85 | $7.20 | $8.55 |
| 25-99 | 1.30 | 4.25 | 5.55 | 6.85 | 8.15 |
| 100-up | 1.20 | 4.00 | 5.25 | 6.50 | 7.75 |

Apiaries accredited and certified by the Alabama State Department of Agriculture.

**O. K. Anderson & Son Apiaries**
**Coffee Springs, Alabama**

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## Electric Uncapping Knife $12.00
AND
## Queen Transferring Tool $2.25
Pierce Patents

**MACY ELECTRIC KNIFE CO.**
6729 SEVILLE AVE.
HUNTINGTON PARK CALIFORNIA

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**QUEENS** **Fall Queens a Specialty** **QUEENS**
**You send the order; I have the queens**

LEATHER COLORED ITALIAN QUEENS
MIDDLE TENNESSEE APIARIES
1 to 25, $1.35; 26 and up, $1.20—From Imported Strains. ¼ books orders. Balance before shipping. All queens clipped and by air mail at no extra cost.
(All queens after June 15, $1.00)

**J. B. TATE & SON**
1029 No. 4th St., Nashville 7, Tenn. Telephone No. 34509M

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## Italian Package Bees and Queens For 1947
*Hardy — Prolific — Gentle*

| | |
|---|---|
| 2-lb. pkg. with queen | $4.00 |
| 3-lb. pkg. with queen | 5.00 |
| 4-lb. pkg. with queen | 6.00 |
| 5-lb. pkg. with queen | 7.00 |

Health certificate, live delivery and satisfaction guaranteed.

**B. J. BORDELON APIARIES, Moreauville, La.**

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**The Newton Bee Co.**
ROUTE NO. 2, BATON ROUGE, LA.
**Package Bees**
**Queens**

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## NOTICE!

Again to all our customers and friends, send us your orders again this season, for your Italian Bees and Queens of the highest quality.

| | 1 to 50 | 50 to 100 |
|---|---|---|
| 2-lb. pkg. with queen | $4.50 | $4.00 |
| 3-lb. pkg. with queen | 5.50 | 5.00 |

QUEENS
1 to 50, $1.50. 50 to 100, $1.25
TESTED QUEENS $3.50 EACH
43 years among the bees.

**HUBER FOREHAND**
SATSUMA, ALABAMA

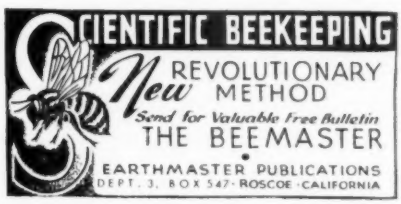
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## HOLLOPETER'S

Hardy, hustling, honey-gathering Italians. Young laying queens $1.25 each. Booked full until in June. No packages.

**WHITE PINE BEE FARMS**
L. B. 80, ROCKTON, PA.

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**Italian Bees and Queens**
QUALITY AND SERVICE.
DELIVERY GUARANTEED.
SPECIAL QUANTITY DISCOUNTS.
WRITE OR WIRE FOR PRICES
**LEO C. WENNER, Hamilton City, Cal.**

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BLUE RIBBON
**Package Bees & Italian Queens**
**FOSTER APIARIES**
COLUSA, CALIFORNIA
Successor to Thos. C. Burleson

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**Italian Queens and Package Bees**
PRICES

| | |
|---|---|
| 3-lb. pkgs. with queen | $4.40 |
| 2-lb. pkgs. with queens | 3.40 |

Queens $1.25. Guarantee full weight and prompt shipment.
**EMILE ARNOUVILLE, Jr.**
EVERGREEN, LA.

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## CANADIAN BEE JOURNAL

Canadian beekeepers have much in common with their neighbors in the U. S. If you are interested in bee activities "North of the Border," send us your subscription NOW. We will see that you receive each monthly copy regularly.

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**CANADIAN BEE JOURNAL**
**54 Bloor St. West, Toronto 5, Ontario**

FIRST QUALITY

## Italian Package Bees and Queens

WRITE FOR PRICES—PLEASE STATE NUMBER OF PACKAGES REQUIRED.

**SPECIAL DISCOUNT ON 100 OR MORE PKGS.**

**JOHN S. SHACKELFORD**

**LIVE OAK, CALIF.**

## For Over 10 Generations

Queens, from stock that has been selected, tested and line-bred for resistance to American foulbrood for over 10 generations, are now available. The association is continuing arrangements to furnish queens from DR stock and package bees to its members. These daughter queens are from mother queens especially selected after tests in 1946 for resistance, uniformity and gathering qualities.

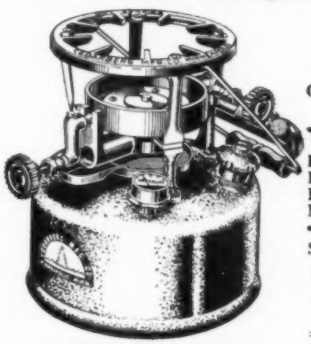
| | | Queens | Packages with DR queen 2-lbs. | 3-lbs. |
|---|---|---|---|---|
| 1 to 9 | (each) | $1.65 | $5.20 | $6.20 |
| 10 to 49 | (each) | 1.50 | 5.00 | 6.00 |
| 50 to 99 | (each) | 1.40 | 4.75 | 5.85 |
| 100 and up | (each) | 1.35 | 4.65 | 5.75 |

Membership not necessarily confined to residents of Iowa.

**Iowa Beekeepers Association**

STATE HOUSE DES MOINES, IOWA

## The No. 50 Cedarberg Utility Furnace



**GIVES HEAT GALORE**

CONVERTS KEROSENE INTO GAS

SPECIFICATIONS

Height, over all ....11"
Floor space ....10¾"
Fuel capacity ....1 gal.
Net weight....12½ lbs.

Shipping Weight 17 Lbs.

**Still Only $18.40**

F. O. B. Minneapolis

HERE'S WHAT YOU'VE BEEN WAITING FOR

**The No. 10 Electric Uncapping Knife**

The best knife on the market. Uses either A.C. or D.C. 110 volt current. Blade, 10 in. long, 2⅛ in. wide, ⅛ in. thick. High carbon knife steel, high and low heat, faster than most steam knives. Order two, have a spare. Satisfaction guaranteed. $13.50 postpaid.

**In Stock For Immediate Delivery--Order Now**

HONEY SALES COMPANY,
1806-08 No. Washington Ave., Minneapolis 11, Minnesota.
Exclusive N. W. Distributors.
Dear Sirs:

Send me.....No. 10 Electric Uncapping Knives.
Send me.....No. 50 Cedarberg Utility Furnaces for
which I enclose $.....in check or money order.
Name .....
Address .....
City ..... State.....
Amount allowed for Postage.....

# *Service*

## On Package Bees

Our schedule calls for shipment being made on time, of full weight packages headed with young queens. We will not book more orders for any one day than can be reasonably handled. This means much to you.

Prices

| | | |
|---|---|---|
| 2-lb. with queen | each | $4.30 |
| 3-lb. with queen | each | 5.50 |
| Larger packages, add | per lb. | 1.20 |
| Queenless packages | Deduct | 1.40 |

10% deposit with order, balance 10 days before shipment.

Orders acknowledged promptly. Mention alternate shipping date if possible.

"THEY PRODUCE"

**Rossman & Long**

Box 133 MOULTRIE, GA.

1947—PRICES— 1947

HIGHEST QUALITY PACKAGE BEES

**SELECT THREE-BANDED ITALIAN QUEENS of our own production**

| Quantity | 1 to 11 | 12 to 99 | 100 or more |
|---|---|---|---|
| 2-lb. package with queen | $4.35 | $4.20 | $4.00 |
| 3-lb. package with queen | 5.35 | 5.20 | 5.00 |

All packages shipped, Express Collect.
$1.00 per package will book your order.
QUEENS, less than a dozen, $1.50 each. 12 to 99, $1.35 each. 100 or more, $1.25 each. Parcel Post, Prepaid.
Full weight packages. Young laying queens.
Live delivery and satisfaction guaranteed.

**JOHN C. HOGG, Apiarist, Tifton, Ga.**

## Imperial Italian and Caucasian Bees and Queens

Reared from the best tested stock available by the best commercial methods.

| | |
|---|---|
| 2 Pound package with queen | $5.00 each |
| 3 Pound package with queen | 6.00 each |
| 2 Frame nucleus with queen | 7.00 each |
| Untested Queens | 1.50 each |

**THE COFFEY APIARIES**

**WHITSETT, TEXAS**

# Postscript For March



Pellett at home at Pellett Gardens.

With more than six hundred in attendance, the Tampa meeting was one of the largest gatherings of beekeepers ever held in America. The combination of a national convention and the Florida winter climate brought them together from more than forty states. Those who had come from the North in many cases found the weather too warm. Leaving zero weather behind it was a great change to find summer temperatures of seventy to ninety degrees each day during the meeting.

When the meeting was over many of the visitors scattered in every direction to see Florida before returning home. On a Sunday afternoon we drove out to the home of Jay Smith near Ft. Myers. There we found Allen Latham, of Connecticut, and T. C. Johnson, of Indiana, soon arrived. It was a rainy day with the thermometer standing at about 70 degrees. The bees were working on crotalaria and on the white flowered Spanish needle which blooms all winter down here. With flowers in bloom and the bees flying it is hard to remember that it is still winter at home.

The variety of plant life in Florida is confusing to the visitor from the North. There are more than 1200 trees which bear fruit which can be grown in the state and when you stop to consider that is a large number. With a twelve-month growing season it is possible to produce surprising results within a short time. With the bees, brood rearing continues throughout the year with slight interruption; and too large a portion of the stores are consumed with colony activities to permit the large surplus which we find in the North.

Many northern beemen are finding the June-in-January climate so attractive that they are establishing apiaries for the purpose of making increase to take north in the spring. It is doubtful whether they save any money over what it would cost to buy package bees, but it keeps them busy and provides a good excuse for the winter stay in the South.

Florida, especially the southern portion of the state, is like another world. Along the streets of Ft. Myers and Miami, coconut trees are everywhere. Coconuts ripen throughout the year, so the same tree has fruit in all stages of development. The coconut had been widely distributed in commerce so is familiar to thousands who have never seen it growing. Aside from the banana and the citrus fruits, most tropical fruits are strange to northern visitors.

The beekeeper who locates here has much to learn regarding bee pasture. The coconut tree is said to yield nectar but not to be as important as others. The cabbage and saw palmettos, which grow wild over much of Florida, are among the best bee plants known to the region. While the honey is dark it has a mild and pleasing flavor which to my taste is quite desirable. The honeyflow from cabbage palm comes in summer so the winter visitor has little chance to observe it. The saw palm yields in April.

Aside from the orange groves, the bees get but little honey from cultivated crops in Florida. In the south part of the state the wild pennyroyal is an important winter-blooming plant. At times it yields surplus honey, but apparently it is of greatest value as a stimulant to build up the colonies for later crops. In favorable seasons it prepares the bees for the orange flow which comes somewhat later.

When one tries to get acquainted with the tropical fruits he finds so many of them that he gets very much confused. Many of them are but little grown and are found only as occasional trees in plant lover's gardens. They are so very different from the familiar things we know in the North that it is difficult to give an accurate idea of either appearance or taste. The strawberry is about the only fruit which grows well in either Iowa or Florida. Even the names have a strange sound. Ceriman, sappodillo, sapote, custard apple, soursop or loquat have no place in a northern garden.

With vegetables the case is different. We find the same tomatoes, peppers, beans, and carrots with which we are so familiar. The only difference is here they are ready for market in January and February instead of midsummer. Winter gardening is one of the most important activities in south Florida. The rich muck soils which have been made available through drainage of the Everglades, provides ideal conditions for the cultivation of thousands of acres of the staples in demand in northern markets.

The crops that one hears most about are tupelo and gallberry in the northern areas, and orange, palmetto and mangrove in the southern sections. Although the weather was warm during our visit we failed to find much activity among the bees at any point. They were flying freely but apparently bringing but little to the hives.

It would be a rather radical change for a man from the North to move to Florida to remain permanently. It is a pleasing experience to enjoy the sunshine and balmy air for a few weeks to avoid the extreme cold of an Iowa winter. Far and away the biggest business in Florida is the entertainment of tourists and everything is commercialized accordingly. Prices are as high as the traffic will bear and one is often surprised at the number of things bearing a price tag which are freely offered elsewhere. With the finest winter climate restricted to a rather small area, the residents have a big advantage which they are quick to realize. It is a fine place to come for a winter outing, but don't forget that it is also a great place to spend money, so prepare accordingly.

FRANK C. PELLETT.

1896 **51** 1947

# Years' Experience

•

ALTHOUGH our supply is limited we will again be in position to furnish our customers with supplies of good quality at the right price.

Our hive bodies, frames, covers and bottoms are still being made of the very best grades of Western Pine Lumber obtainable. In early summer we will have an additional supply of honey sections made from the finest Northern Wisconsin Basswood, along with about everything the thrifty beekeeper needs in the way of supplies.

Write for our price list which will be available in the month of February.

•

**MARSHFIELD MFG. CO., Inc.**
**MARSHFIELD, WISCONSIN**

# JENSEN'S

**"MAGNOLIA STATE" STRAIN**

## *Italian Package Bees and Queens*

What counts in package bees and queens is **"Quality"** plus **"Delivery"** not promises or excuses. It is one thing to write highfalutin advertisements, but quite another to deliver the goods.

We do not claim to have the only good bees or queens, nor to make shipment exactly on the dot in every case; but we dare say we average up with the best, which still doesn't satisfy us. After 33 years' experience we are aware we still have plenty to learn. Some day, if we live long enough, we hope by trying hard, to do better.

| | Queens | 2-lb. Pkgs. with Queens | 3-lb. Pkgs. with Queens |
|---|---|---|---|
| 1-24 | **$1.40** | **$4.50** | **$5.85** |
| 25-99 | **1.30** | **4.25** | **5.55** |
| 100-up | **1.20** | **4.00** | **5.25** |

•

**JENSEN'S APIARIES**
**MACON, MISS.**

**Where QUALITY is a "FIRST."**

# TANQUARY HONEY FARMS

# QUEENS • QUEENS • QUEENS

**We will have lots of queens starting March 5th, and will continue to have them through October. May we help you with your queen problems? We are completely booked up for package bees through April.**

**Place your order early for queens, we guarantee safe arrival on all bees and queens. Queens clipped at no extra cost. Queens POSTPAID.**

**PRICE LIST UNTIL JUNE 1ST**

| Quantity | 1 to 5 | 6 to 49 | 50 to 99 | 100 up |
|---|---|---|---|---|
| 2-lb. packages bees with queens | $4.50 | $4.35 | $4.20 | $4.00 |
| 3-lb. packages bees with queens | 5.50 | 5.35 | 5.20 | 5.00 |
| 4-lb. packages bees with queens | 6.50 | 6.35 | 6.20 | 6.00 |
| 5-lb. packages bees with queens | 7.40 | 7.25 | 7.10 | 7.00 |
| Queens | 1.45 | 1.40 | 1.35 | 1.30 |
| Tested Queens | 2.30 | 2.20 | 2.10 | 2.00 |

**PRICES AFTER JUNE 1ST**

| | | | | |
|---|---|---|---|---|
| 2-lb. packages bees with queens | $4.25 | $4.10 | $3.95 | $3.75 |
| 3-lb. packages bees with queens | 5.25 | 5.10 | 4.95 | 4.75 |
| 4-lb. packages bees with queens | 6.25 | 6.10 | 5.95 | 5.75 |
| 5-lb. packages bees with queens | 7.20 | 7.00 | 6.85 | 6.75 |
| Queens | 1.30 | 1.25 | 1.10 | 1.00 |
| Tested Queens | 2.15 | 2.00 | 1.95 | 1.80 |

**Queenless packages, deduct $1.15 per package**
**Queens POSTPAID. Package bees express collect. Payable in U. S. Funds.**

# TANQUARY HONEY FARMS, INC.

**LENA, SOUTH CAROLINA**

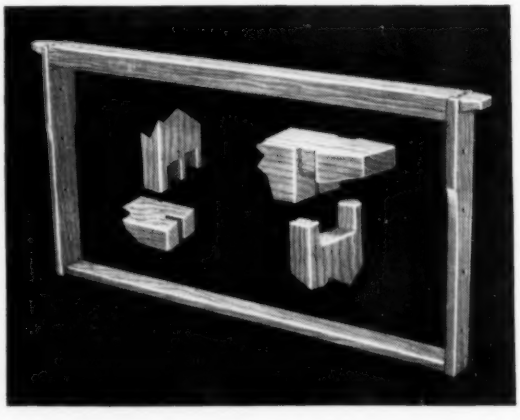
# BEE HIVES

**We want your high regard for**

## *Root Equipment*



We also want to supply you with your equipment requirements this year. ¶These two desires are difficult to bring to pass under present conditions. The most suitable lumbers are yet in limited supply. Substitute lumbers are high in price and often low in quality. But we are doing our best.



Root QUALITY BEE SUPPLIES

**THE A. I. ROOT CO.**

MEDINA, OHIO

Root QUALITY BEE SUPPLIES